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East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2180

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GDR SEES PROBLEMS IN MIXED EAST-WEST ENTERPRISES

West German Commentary

Bonn IWE-WIRTSCHAFTSDIENST in German Vol 22 No 20, 26 May 81 p 1

[Unattributed report: "GDR Has Reservations About Mixed East-West Enterprises." A translation of the Potsdam-Babelsberg STAAT UND RECHT article cited below follows this report]

[Text] The GDR is extremely skeptical about mixed East-West enterprises such as the ones that exist in Romania, Hungary, Bulgaria and Poland as part of the economic cooperation between socialism and capitalism. Mixed enterprises in which Western firms are involved up to 49 percent could be quite effective in selected fields, so said the East Berlin journal STAAT UND RECHT, more serious, in the view of that journal, however, was the fact that thereby capitalist enterprises were granted the possibility of a direct influence, even if limited, on the socialist economy. The Western firms, furthermore, sought to draw mixed enterprises into their own market strategy but were hardly ready to offer them, or seek for them, sales opportunities in the Western industrial countries. Altogether, mixed enterprises were only of minor importance to economic cooperation between the two systems.

Concern Over Western Influence

Potsdam-Babelsberg STAAT UND RECHT in German Vol 30 No 5, May 81 signed to press 24 Mar 81 pp 420-430

[Article by Dr Marianne Andrae, GDR Academy of Political Science and Jurisprudence: "Mixed Enterprises in Socialist Countries--An Organizational and Legal Form of Economic Cooperation Between Systems"]

[Text] The task to make foreign economy more effective as a basic problem of the whole economic growth of the GDR, to organize and thoroughly examine export production for the nonsocialist economic region under the intensified world market conditions, to find out which further essential conclusions have to be drawn for all fields in the further development of our foreign economy[1] requires, among other things, to examine and perfect existing organizational and legal forms of the economic cooperation between the systems. For that it is also necessary to analyze the approach taken by other CEMA states in this field. To that we intend to make a contribution by discussing some legal problems that have to do with the setting up and the activities of mixed enterprises in the territory of socialist countries.[2]

Characteristics of Mixed Enterprises in Socialist Countries

Among the CEMA countries, Romania, Hungary, Bulgaria and Poland use mixed enterprises in their territories as a special form of cooperation with partners of nonsocialist countries and promote their being set up. Those countries have issued legal provisions which set down the general framework for the establishing, and the activity, of such enterprises.[3]

In conformity with legal arrangements made by Romania, Hungary, Bulgaria and Poland, mixed enterprises may engage in production, commercial and service activities and may be set up for the areas of scientific-technical research. By using foreign capital and important latest technologies, know-how, equipment and installations, mixed enterprises are intended to produce high-grade commodities at low costs for their own economy and for export. In this context they are principally oriented to a long-term involvement in the international division of labor, the expansion of export into nonsocialist countries, higher foreign exchange benefits and reduction of imports.

Mixed enterprises are economic organizations in which, along with domestic socialist economic organizations (combines, enterprises, foreign trade enterprises), enterprises of nonsocialist countries hold shares in form of monetary investments (foreign exchange), real value (e.g. plants) or scientific-technical services. Regulations in Romania and Poland keep the maximum of foreign participation down to 49 percent. The same holds true as a general principle for Hungary and Bulgaria. This principle of a minor partnership aims at ensuring the predominance of socialist property and production relations in accordance with constitutional provisions in those countries even when foreign capitalist enterprises are permitted shares in economic organizations.

Such enterprises are subject to the legal order of any given socialist state, its general rules or the special ones set up for them, including those of social law (organizational law). They owe their origin to the legal order of that state, from which they also derive their competence, and are, in legal terms, domestic economic organizations.

Mixed enterprises are set up on the basis of contracts (social contract, statute, framework and supplementary contract) with foreign partners by socialist economic organizations authorized to do so. The contracts settle, among other things, the partnership relations, the relations of assets, the economic activity of the enterprise and its management and profit distribution.

A characteristic feature is the sharing in the economic yield of the enterprise by the domestic and foreign partners, expressed in the share of profit and loss through the business activity. Shared profits depend on the percentage share of investment. Transfer of profit revenue by foreign partners into the currency agreed upon is ensured by legal regulations and partly also depends on foreign exchange management. The foreign partner, on the other hand, takes the risks for his shares in the joint business enterprise at least up to the level of his investment.

The foreign partner shares in the management and planning of the activity of the mixed enterprise which, in principle, entails all fields of economic activity down to production proper. In other forms of cooperation a foreign partner is likewise granted advisory and control rights in handling projects, but they are not on the level of his right to participate in decision-making within the framework of mixed enterprises. So the management participation by the foreign partner becomes a crucial criterion for mixed enterprises with their seat in socialist countries. It is handled within the organs of the enterprise in which both domestic and foreign partners are represented.

Establishing mixed enterprises on the territory of socialist countries requires special central state controls to make sure that their activities are tied in with the socialist state and social order, their overall economic effectiveness is ensured even with regard to long-term stresses on the economy through the guaranteed transfer of the profit and liquidation shares of the foreign partner in foreign exchange, and so that they present no interference factor in the further development of the socialist social order. Thus the setting up of mixed enterprises on the territories of Romania, Hungary, Bulgaria and Poland is subject to strong standardized state licensing authorizations. The basic contractual documents are examined through state licensing procedures, at which time also the economic efficiency of the concrete project has to be demonstrated. By means of the state licensing procedure it is ensured that the setting up and the activity of such enterprises conform with the overall social and economic development conceptions of a given socialist state. The socialist state determines their number, exercises an influence on the matter of their activity, and sees to it that the objective of their being licensed is taken account of in the contractual documents.[4]

The Conditions for the Economic Activity of Mixed Enterprises

One of the most complicated problems in establishing and in the activity of mixed enterprises is setting down the conditions for their economic activity. The main thing that matters here is to ensure their overall economic effectiveness with a view to the fundamental principles in the state and economic order of a socialist country in question while providing the capitalist enterprise with guarantees for the material incentive it finds in this form of cooperation. Now it has been found that, to implement such an objective, economic and legal conditions have to be created that in part greatly deviate from those of state economic organizations. That holds true, among other things, for the planning of economic activity and its being tied in with national economic planning, the relations with economic management organs, the integration within the supply and sales system of the country in which the enterprise has its seat, the foreign economy activity, the foreign exchange management, the assets economy, the state budget relations, and the conditions for employing associates, especially the foreign ones. The scope and substance of these special conditions set down, depend in these countries on their system of economic management and planning and their foreign economic relations, the place and competencies of state economic organizations, and the relation between domestic and foreign market prices.

Uniformly one starts from the proposition that the mixed enterprises fund their economic activities, including their foreign economy activity, themselves, make their own profits and bear possible losses themselves. They are included within the given national and planning systems with an eye to what is particular about them. The latter mainly means that regardless of the relevant position taken by comparable state economic organizations, far-reaching organizational independence is granted to planning their own economic activity. Relations with the economic management organs mainly come in the form of consultations and agreements on coordination.[5]

Normative conditions for the economic activity differ greatly in the various countries, which to a large part has to do with differences in the states' domestic systems of management, planning and economic stimulation. In Romania, for instance, a mixed enterprise is, in principle, treated as a foreign enterprise. It gets a special status that is completely different from that of state economic organizations. Payments and settlements of accounts, and calculations and accounting, in principle, are made in foreign currency. Supply and sales relations with domestic economic organizations are based on contracts with Romanian foreign trade organizations, and their bases are the world market prices. In principle, a mixed enterprise is entitled, however, to conclude foreign trade contracts directly.[6]

In Hungary, mixed enterprises in principle come under the economic, financial, currency and foreign trade controls that also apply to state economic organizations. Some exceptions are allowed for through special legal regulations. They also use the opportunity to grant some branches or economic organizations more favorable conditions, so that in justified cases mixed enterprises can get special favors, e.g., with respect to depreciation.[7] These conditions, which depart from those for state economic organizations, are not principally set down by normative rules but individually, within the framework of the state's establishment procedure in accordance with the concrete project in cooperation and the contract terms negotiated.[8]

Property Right Relations in Mixed Enterprises

The nature of the property rights relations have no immediate practical importance for any particular project, to be sure, but is important for an overall analysis of this form of cooperation between the systems.

As mixed enterprises, legally, rate as domestic economic organizations and fall under domestic law, the problems of their property rights must, with an eye to what makes them specific, also be solved on the basis of the property rights system in any given socialist state. There are two facts here that call for special attention:

1. Any share invested by a state economic organization is state or public property. Were one to turn part of the social property by this investment into some sort of enterprise property, this would contradict the essence of public ownership. The principle anchored in the Constitution, which makes the socialist state the holder of public property, must also be realized in the property rights constellation of the mixed enterprises. The state's ownership position is documented by the state management and control over the process that establishes the enterprise. The socialist state decides which national economic organization gets involved and makes available, or authorizes the use of, the necessary funds out of public property. The profit shares accruing to the participating state economic organization are elements

of public property. The socialist state assumes the property rights through the participating state economic organizations in the given case.

2. Mixed enterprises are characterized by their independence in the exercise of property rights. This is a critical prerequisite for combining over long range socialist and capitalist property within the scope of the enterprise. It makes possible, on the one hand, the use of all the assets in the economic interests and, on the other, respects the interests and participation by the foreign partners within the framework of the organs of the enterprise in exercising property rights with respect to the total property.[9] The state socialist character of property shares is no obstacle for it, nor does it reduce the creditability of the enterprise. Through confirming the founding documents and the domestic licensing act a socialist state grants competency to the mixed enterprise which ensures the fulfillment of the contractually agreed functions and meets the specific needs of this organization. That also includes the granting and recognition of independence toward assets and the legal competencies that come with it.

In accordance with whatever legal form is adopted, the foreign partner becomes the owner of his shares in conformity with his partnership relations with the assets of the mixed enterprise, or the assets invested become state public property. Regardless of which property rights constellation is chosen, the public appropriation process in these organizations is marked by its long-term, even if temporary, connection with the opposite type of ownership in terms of its public character. On the one hand, the majority share of socialist property in general, the central state management and control over the founding procedure, and the work of the domestic partner organizations within the management organs provide for the public ownership to remain the critical factor in the public appropriation process and keep the activities of the organization from contradicting the overall social interests of the socialist country in question. On the other hand, this brings out the difference from other socialist economic organizations in that state, as the process of social appropriation is more or less strongly also marked by the participating foreign capitalist enterprises. They are granted participatory decision rights and thus an influence on the production and utilization process in the enterprise, so as to take their interests in this form of cooperation into account.

Legal Forms of Mixed Enterprises

Romania, Hungary and Poland at this time use for mixed enterprises legal forms derived from capitalism, such as the limited liability company or the joint-stock company. It is possible to use them because these are legal forms created in capitalism for mergers or investments of capital and because the general abstract legal principles applying to them, for liability, profit and risk distribution, legal independence for mergers while securing the founders' management and control, are also applicable to mixed enterprises. Moreover, these legal rules grant much leeway for contractually shaping the relations among the founders as well as the organizations themselves. Within this framework, it facilitates agreements in conformity with the objectives and position of mixed enterprises in any socialist country. Where traditional rules do not meet their purpose in a socialist country, or where necessary rules are lacking, special rules are created. These normative regulations--which differ in substance and scope--contain provisions concerning the public legal relationship itself, e.g., on the substance, the partners, the duration and the management of the enterprise, the size of the partnership, the capital investments and their ratings, the content of the contract or statute and the determination and distribution of profits. One must further refer to the legal terms for the economic activity which critically shape the whole legal status of mixed enterprises. Here it becomes clear that, first, by use of traditional legal institutions taken over from capitalism, a specific domestic legal form for mixed enterprises evolves in these countries as the organizational and legal form for economic cooperation between the systems. In Bulgaria the mixed enterprise was normatively ruled on in its essential features, as a nonjuridical and as juridical person, in decree no. 535, without any reference to the inherited forms of business organization.

What is specific about mixed enterprises, and this also shapes their legal structure, is that they are of a twofold character. For one thing they are domestic economic organizations. Thus they are of a national character and are part of the economic system in a socialist state. But then they are also forms of cooperation relations between the systems, and so have something peculiarly international and are subject to the general conditions for the development and conduct of inter-system economic relations. The national rules of the game as used in the four CEMA countries makes possible, as an adequate legal method, combining both aspects organically within the legal rulings. It conforms with the national rules that an enterprise is, in principle, subject to the legal codes of the given socialist state, while through the special rules account is taken of its specific international aspect, i.e., of the participation by foreign capitalist partners as a form of inter-system cooperation. The character of domestic economic organizations is reflected in particular by the state licensing and authorization procedures, by rules that ensure the major partnership of domestic socialist economic organizations and their crucial influence on the management of the enterprise, and by the rules which ensure that the enterprise is integrated with the given economic system, while due regard is given to its particular features. The international specifics are expressed by the creation of mixed enterprises on the basis of contractual commitments and special conditions for their conducting their business and by far-reaching contract privileges in the shaping of intra-organizational legal relations and relations among the partners.

The Place of Mixed Enterprises in Inter-System Cooperation

The criteria pointed out here indicate that enterprises are a possible and, for selected projects, an effective form of inter-system economic cooperation. That holds true in particular for the close, complex and interdependent cooperation among the partners and the profit and loss participation by the foreign partner, which stimulates his interest in seeing the enterprise become economically highly effective. This is, among other things, an important aspect in cases where the foreign partner brings in scientific-technical data and through his profit and loss sharing often is much more interested in their effective use and constant perfection than in other forms of transfer of technology. The mixed enterprise must itself put up the costs for the participation by the foreign partner, and what it costs depends on how economically effective it is. As the economic objectives of both partners are realized only through the activity of the enterprise, there is an inducement, for the sake of the mixed enterprise, that the opportunities provided the single partners are used, e.g. in research and in the sale of the products.

The factors presented also explain how especially relevant it is to license mixed enterprises in socialist countries. Setting them up affects the appropriation, planning, management and organizational process in a partial area of the economy because it admits a direct influence and participatory decision-making by foreign capitalist enterprises in domestic economic organizations, if to a limited extent and within an established framework.

Especially the possibility that comes from property law participation of gaining a direct influence on the science and technology, production and sales in a mixed enterprise is seen as a crucial factor in capitalist enterprises having turned to this form of cooperation.[10] These enterprises seek to draw the mixed enterprise into the overall enterprise strategy of the foreign partner. That applies, e.g., to the desire to supply a large part of the equipment for the enterprise, to have a decisive say-so about its technical development and production structure through bringing in techniques and technology, and to secure for itself in the phase of economic activity a large share of the ancillary supplies, mainly high-grade components. But by means of these mixed enterprises they also seek new sales outlets in that or other CEMA countries or in certain developing countries, wherefore use then is to be made of the relations and preferential terms for organizations in the country where the enterprise has its seat.[11] In turn, there is only little readiness to grant mixed enterprises sales opportunities in the developed capitalist countries which are doing little to help them find any there. And that makes it rather complicated to commit the contract documents to one of the most essential economic goals pursued through the licensing of mixed enterprises, increased exports into the nonsocialist economic region.[12] Thus a decisive importance to implementing economic objectives during the phase that precedes the setting up of such an enterprise attaches, among other things, to partner selection, market analysis, determining economic benefits, carefully defining the object of the joint business activity, ensuring exports and foreign currency revenue, and negotiating the various contract conditions including the licensing contract.

Altogether one may take it for granted that mixed enterprises with their seat in the territory of socialist countries do not constitute a main form of inter-system economic cooperation, comparable to other contractual forms of cooperation, even for CEMA countries that have made the economic policy decision to admit them. Their value rather lies in being a supplementary form of cooperation for selected projects where a desired economic objective cannot establish such cooperation in any other form. Within this limited scope mixed enterprises may, in certain relations, provide cooperation at mutual advantage in forms that are expedient for both sides. Within the system of economic organization in any one CEMA state as such they are likely to be only of minor importance, even if particular projects are engaged in fairly large economic projects.

In this context one must take issue with views expressed in the bourgeois literature to the effect that joint enterprises are in fact the highest form of cooperation, the development of which in inter-system cooperation is either not possible or greatly confined due to characteristic features inherent in the socialist economic and social system.[13] What is taken as the yardstick for inter-system cooperation relations here are the typical capitalist forms of cooperation under the conditions of monopoly capital, particularly in the form of the various mergers which are an element of the concentration, centralization and intertwining process of capital in science and technology, production and sales. Such forms of cooperation within the capitalist economic system, which imply the power concentration of capital and often aim at economically subjugating the economically weaker partner, inhere in that system and can thus not be applied to inter-system cooperation relations as they do not conform with the principles in this cooperation. It is correct, therefore, to emphasize that in the inter-system economic relations some forms of cooperation that exist in the relations among countries with a capitalist market economy and presuppose the private ownership in the means of production, cannot apply or can do so only to a limited extent.[14] What we are rather concerned with is the use and development of, partly, specific and organizational forms that take into account the difference of economic systems due to the opposed nature of property and production relations and, on that basis make possible the development of equal and mutually advantageous cooperation relations. The state management and planning system in the economy and foreign economy of socialist states, based on the public ownership in the means of production, is no obstacle but is, rather, an essential premise for it. For that reason one must resolutely reject any efforts which would make the development of inter-system cooperation relations, of which mixed enterprises are one form, dependent on the preconditions in the internal economic and foreign economy system of socialist states, and which in essence constitute an assault on fundamental principles of socialist management, planning and economic stimulation, and thus on the economic foundation of the socialist social order.[15]

FOOTNOTES

1. Concerning foreign economy tasks, cf. Comrade Erich Honecker, "Aus dem Bericht des Politbueros an die 11. Tagung des ZK der SED" (From the Politburo Report to the 11th SED Central Committee Session), Berlin, 1979, pp 37 f; G. Beil, "Discussion Speech," ibid., p 173.

2. On the legal status of mixed enterprises in the territory of socialist countries, cf, in particular, M. Andrae, "The Legal Rules in the Founding and Activity of Mixed Enterprises in Romania, Hungary and Poland and Investment Participation by Foreign Enterprises in Yugoslavia," AKTUELLE BEITRAEGE DER STAATS- UND RECHTSWISSENSCHAFT, No 209, Potsdam-Babelsberg, 1979.

3. The most important regulations are in Romania: Decree 424 and 425, 2 November 1972, BULETINUL OFICIAL, Part I, No 121, 4 November 1972; in Bulgaria: Decree 535, DURZAVEN VESTNIK, 28 March 1980, No 25, p 273; in Poland: Council of Ministers Resolution No 24 and Guideline on the Founding and Activity of Enterprises With Foreign Capital Participation Domestically, of 7 February 1979, MONITOR POLSKI, 23 February 1979, No 4, Pos. 36; Finance Minister Decree on Some Principles in the Financial Management of Corporations With Foreign Capital Participation and Authorization for Engaging in Some Foreign Exchange Business by These Corporations, 18 June 1979, MONITOR POLSKI, 30 June 1979, No 16, Pos. 97; in Hungary: Finance Minister Decree No 28, 1972 in the version of Decree No 7, 1977, MAGYAR KOZLONY, 6 May 1977, No 35; Finance Minister Instruction No 5, 1979, FINANCE MONITOR, 25 July 1979, No 10, p 123. Partly the rules are reprinted in M. Andrae, op. cit., pp 101 ff. A survey of existing enterprises is given in the following EEC documents: "East-West Industrial Cooperation," United Nations, New York, 1979; "EEC/Trade/132" p 14, note 48; "Joint Venture Legislation in Eastern Europe and Yugoslavia: A Survey of Recent Developments, 1977-1979," "EEC/Trade/AC," 14R/2 of 29 April 1980, pp 7, 14. Thereafter, in Romania thus far 9, in Poland, 5, in Hungary 4 mixed enterprises were set up, some of them, mixed banks.

4. The characteristics described illuminate the difference in principlle between the mixed enterprises and the international economic organizations in socialist countries reflected in the functions of the legal rules, their content, the methods in applying the rules and the legal forms. The latter are essentially joint organizations of the CEMA countries, set up jointly in the process of socialist economic integration by the socialist states involved and exercising joint coordinating or economic management functions within the system of socialist international economic cooperation. On international economic organizations, cf. L. Ruester, "Die internationalen oekonomischen Organisationen der RGW-Laender--Rechtsfragen" (The International Economic Organizations of the CEMA Countries--Legal Matters), Berlin, 1980, pp 96 ff.

5. In Bulgaria, for instance, standardized explicitly in Article 13 of Decree 535, op. cit.

6. Cf. C. Alexandru, "Some Economic and Financial Problems in the Activity of Mixed Enterprises in the Territory of Romania," FINANZE SI CREDIT, 1973, No 5, pp 34 ff.

7. Cf. B. Csikos-Nagy, "East-West Cooperation from the Microeconomic Vantage Point," MARKETING IN UNGARN, 1970, No 4, pp 9 ff.

8. Cf. I. Toldy-Osz, "Possibilities of Joint Enterprises With Western Participation," MARKETING IN UNGARN, 1979, No 4, pp 21 ff.

9. With reference to this aspect one also finds the view expressed in the literature that the mixed enterprise owns its assets. Cf. T. Popescu, "The Legal Position of Mixed Enterprises in Romania," "Jahrbuch fuer Ostrecht," Tuebingen and Basel, 1973, Vol I, pp 166, 161; T. Sarkozy regards mixed enterprises as civil law proprietors, in "Property Rights Problems in International Economic Mergers With Special Reference to CEMA Integration," "Acta Juridica," Tomus 20 (1-2), Budapest, 1978, pp 130 ff.

10. Cf. F. Levcik and J. Stankovsky, "Industrial Cooperation Between East and West," Vienna and New York, 1977, p 89; B. N. Richman, "Multinational Corporations and the Communist Nations," MANAGEMENT INTERNATIONAL REVIEW, Wiesbaden, 1976, Vol 3, p 9; H. J. Moecke, "Legal Matters in the Economic Cooperation Between East and West," W. von Amerongen, ed., "Rechtsfragen der Integration und Kooperation in Ost und West," West Berlin, 1976, p 372.

11. Cf., e.g., F. Levcik and J. Stankovsky, op. cit., p 89; P Ploetz, "Kooperationserfahrungen der Bundesrepublik Deutschland mit Jugoslawien" (Cooperation Experiences of the FRG With Yugoslavia), Hamburg, 1974, p 125.

12. Cf. B. Csikos-Nagy, op. cit., pp 12 f; I. Toldy-Osz, op. cit., pp 21 ff.

13. Cf., e.g., S. A. Ehrhardt, "Joint East-West Ventures," "Osteuropa--Gemeinschaftsunternehmen im Rahmen der industriellen Ost-West Kooperation" (East Europe--Joint Enterprises Within the Framework of Industrial East-West Cooperation), Frankfurt/Main, 1977, pp 12, 50 ff.

14. Cf. B. Csikos-Nagy, op. cit., p 6.

15. Such demands are raised implicitly or, at times, explicitly. E.g., H. F. Buch speaks of "prerequisites in terms of the political system" that would have to be created by the socialist countries for the further development of inter-system cooperation and comes up with a list of demands aimed in particular against the socialist countries' foreign economy system, cf. H. F. Buch, "Improving the GDR's Foreign Economy Efficiency Through East-West Enterprise Cooperation," DEUTSCHLAND-ARCHIV, Cologne, 1980, p 498.

5885
CSO: 2300/329

CSSR FOREIGN TRADE 1976-1980; TRENDS FOR 1981-1985 VIEWED

East Berlin DDR AUSSENWIRTSCHAFT in German 22 Jul 81 p 1, 2

[Text] Foreign trade involving a third of the goods produced each year is of vital importance to the Czechoslovak economy. The export and import quotas set for the 1976-80 Five-Year Plan were met, according to information released by the CSSR Ministry of Foreign Trade. In 1980 the foreign trade balance amounted to the equivalent of Kcs 162 billion in foreign currency, a 66.3 percent increase over 1975. This represents an average annual increase in the 5-year period of 10.7 percent exceeding by far the increase in the national product and in industrial production. Between 1976 and 1980 exports increased faster than imports. On the average, exports increased by 11.5 percent while the corresponding figure for imports is 10 percent. Crucial for these results were the 1980 volumes of exports and imports which with 14.6 percent and 7.6 percent represented the highest export and lowest import volume of the past five-year plan.

The export volume achieved in 1980 enabled the CSSR to reduce its long-standing foreign trade deficit since 1973 which reached its peak in 1979 with Kcs 5.6 billion to the equivalent of Kcs 1.1 billion in foreign currency.

According to plan the CSSR intends to pursue this trend in the development of its foreign trade relations in the 1980 to 1985 Five-Year Plan as an integral part of its economic policy. The planned increase in the country's exports is expected to surpass imports. This is viewed as indispensable because prices on international markets, especially those of raw materials and fuels essential to the national economy, rose markedly while only 80 percent of these increased costs were covered by price increases of goods exported by the CSSR. This foreign trade objective is to be fulfilled primarily by reacting more flexibly to developments on foreign markets and improving the structure of exported goods, their technical standard and quality.

Economic Relations to CEMA Countries--a Stable Base for Foreign Trade

The trade relations with socialist countries, whose proportion of the overall Czechoslovak foreign trade volume increased over that of the 1971 to 1975 period attaining 71.5 percent in the last five-year plan, are of vital importance. Steady intensification of socialist economic integration with CEMA countries, especially with the Soviet Union, again proved to be a stable base for continued development of the CSSR national economy. Participation in the implementation of 106 multilateral and more than 240 bilateral agreements on production specialization and cooperation and in joint CEMA projects as well as in the construction of the Sojuz natural gas pipeline and Kijembaj asbestos mining and processing project has assured the CSSR of supplies not only of deliveries of necessary fuels, raw materials, machinery and equipment but provides it also with a long-range stable market for its products.

In the 1976 to 1980 period 67.1 percent of the CSSR foreign trade was with CEMA countries. Trade volume with these countries increased on the average by 10.4 percent a year with exports increasing by 11 percent and imports by 10.1 percent. The lions share goes to the USSR and amounts to 35.8 percent of the CSSR foreign trade in 1980 and to 51.3 percent of the trade with CEMA countries. Between 1976 and 1980 the annual rate of increase of the Czechoslovak exchange of goods with the Soviet Union reached an average of 12.9 percent, exceeding thereby the respective figure of the overall Czechoslovak foreign trade volume. Trade relations with the Vietnamese Socialist Republic, the Mongolian Peoples Republic and the Republic of Cuba also exhibited higher than normal growth. Of other socialist countries, trade with the Yugoslav Socialist Federated Republic reached a steady dynamic rate of development. Omnilateral economic, scientific and technical cooperation with socialist countries, especially with the USSR, constitutes the basis for continued development of foreign trade relations and the achievement of higher quality by comprehensive integration of production. According to preliminary high estimates exports to CEMA countries will increase by around 29 percent and imports by around 23 percent in the 1981 to 1985 period with deliveries to the USSR increasing by 45 percent and purchases from the USSR rising by 38 percent. In 1985 the USSR proportion of the CSSR trade with socialist countries will amount to about 55 percent.

Continued Increase of Trade Relations with Developing Countries

In the period from 1976 to 1980 the CSSR continued to consolidate its trade relations with developing countries. In 1980 alone 55 documents were ratified as proof of a bilateral desire to explore the potential for broadening and intensifying trade relations. In the period from 1976 to 1980 the exchange of goods with developing countries increased annually by 10.9 percent on the average. This exceeded the rate of increase of the CSSR foreign trade volume. But the proportion of trade with developing countries between 1976 and 1980 shrunk somewhat compared to the period from 1971 to 1975.

Within this group of countries Brazil, Syria, Iraq, Libya, India, Iran and Egypt are the trade partners with the largest volume. The exchange of goods with Brazil, Syria, Argentina, Malaysia, Algeria, Tunisia, Afghanistan and Ethiopia increased dynamically. The exchange of goods with India has stabilized while trade with Egypt, Libya, Iraq, Iran, Morocco and other countries fluctuated widely from year to year during the past five-year plan.

In the 1981 to 1985 Five-Year Plan the development of trade relations with developing countries is expected to intensify. Among export goods, machinery and equipment will again predominate primarily for economic sectors serving to consolidate the independence of these countries by opening up their natural resources and raising the living standard of their peoples. The imports from these countries will yield ever richer fruits of already existing production cooperation and of that in preparation.

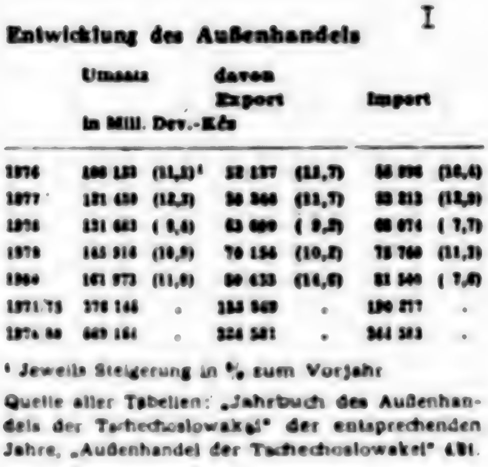
High Increases of Exports to Capitalist Industrial Countries

In 1976 to 1980 trade with capitalist industrial countries exhibited a rate of increase slightly above average. The annual increase amounted to 9.8 percent. This rate of increase was due mainly to the 1980 foreign trade volume when the CSSR increased its export to these countries by almost 25 percent over 1979; imports increased by 9 percent. As a result the CSSR was able to reduce its trade deficit (which in 1978 and 1979 was the equivalent of Kcs 4.3 billion in hard currency) with this group of countries by about the equivalent of Kcs 2.4 billion in hard currency while its volume of trade with Common Market countries was essentially balanced last year.

From 1976 until 1980 the volume of foreign trade with Austria, Switzerland, Greece, Belgium, the U.S., Canada and Australia was better than average while the exchange of goods with the FRG, by far the foremost trade partner among this group of countries, rose in this period by 10.4 percent annually.

Compared to the 1971 to 1975 period the proportion of the capitalist countries' trade with the CSSR diminished.

In the period from 1981 to 1985 the CSSR will conduct its trade relations with capitalist industrial countries on the basis of the principles of self-determination and mutual advantage designed to broaden economic, scientific and technical cooperation.



Entwicklung des Außenhandels I

	Umsatz		davon Export		Import	
	in Mill. Dev.-Kčs					
1976	108 153	(11,2)[1]	52 137	(12,7)	56 016	(10,4)
1977	121 430	(12,3)	58 266	(11,7)	63 213	(12,9)
1978	131 683	(8,4)	63 609	(9,2)	68 074	(7,7)
1979	145 916	(10,8)	70 156	(10,2)	75 760	(11,3)
1980	161 973	(11,0)	80 633	(14,9)	81 340	(7,4)
1971/75	378 146	.	187 569	.	190 577	.
1976/80	669 164	.	324 581	.	344 583	.

[1] Jeweils Steigerung in % zum Vorjahr

Quelle aller Tabellen: „Jahrbuch des Außenhandels der Tschechoslowakei" der entsprechenden Jahre, „Außenhandel der Tschechoslowakei" 4/81.

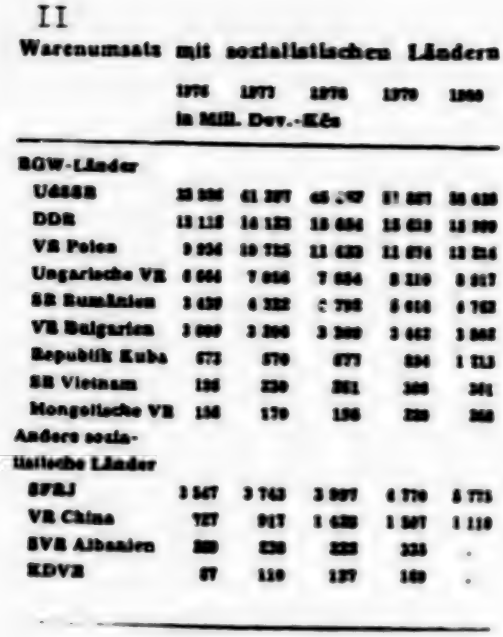
Key: Development of foreign trade

Total Volume	Export Portion	Import Portion

in Kcs foreign currency equivalent

[1] Each time an increase by % over preceding year

Source of all tables: "Yearbook of Czechoslovak Foreign Trade" of the respective years, "Czechoslovak Foreign Trade", April 1981.



II

Warenumsatz mit sozialistischen Ländern

	1976	1977	1978	1979	1980
	in Mill. Dev.-Kčs				
RGW-Länder					
UdSSR	[illegible]	41 [illegible]	45 [illegible]	[illegible]	[illegible]
DDR	13 118	14 123	15 [illegible]	15 [illegible]	15 [illegible]
VR Polen	9 936	10 725	11 [illegible]	11 876	12 [illegible]
Ungarische VR	6 664	7 056	7 634	8 119	8 [illegible]
SR Rumänien	[illegible]	4 322	[illegible]	5 616	6 762
VR Bulgarien	3 [illegible]	3 [illegible]	3 [illegible]	3 [illegible]	3 [illegible]
Republik Kuba	673	570	677	834	1 113
SR Vietnam	135	230	261	[illegible]	[illegible]
Mongolische VR	156	170	156	[illegible]	[illegible]
Andere sozialistische Länder					
SFRJ	3 567	3 743	3 997	4 770	5 775
VR China	727	917	1 [illegible]	1 [illegible]	1 110
SVR Albanien	[illegible]	[illegible]	[illegible]	[illegible]	.
KDVR	87	119	137	[illegible]	.

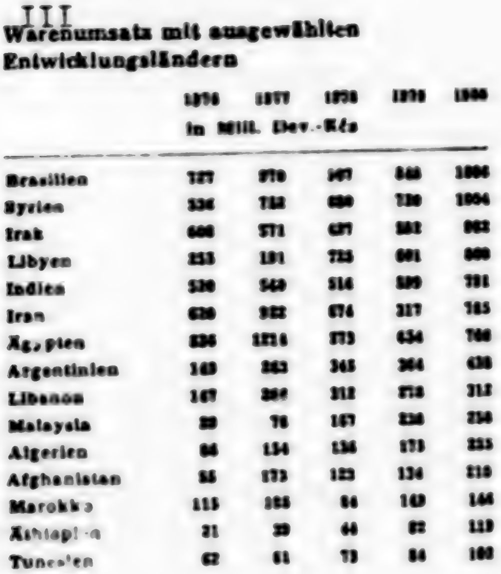
Key:

Volume of trade with socialist countries

	1976	1977	1978	1979	1980
	in Kcs foreign currency equivalent				

CEMA countries
USSR
Peoples Republic of Poland
Hungarian Peoples Republic
Romanian Socialist Republic
Bulgarian Peoples Republic
Republic of Cuba
Socialist Republic of Vietnam
Mongolian Peoples Republic
Other socialist countries
Yugoslav Socialist Federated Republic
Peoples Republic of China
Socialist Peoples Republic of Albania
Korean Democratic Peoples Republic

III



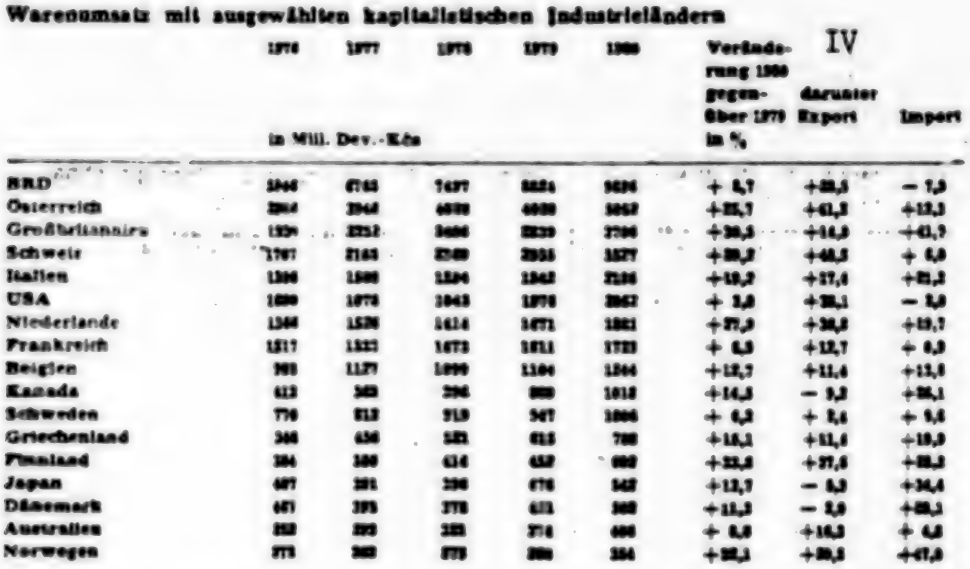
Warenumsatz mit ausgewählten Entwicklungsländern

	1976	1977	1978	1979	1980
	in Mill. Dev.-Kčs				
Brasilien	727	970	967	848	1006
Syrien	336	752	690	730	1004
Irak	606	571	657	581	982
Libyen	255	101	725	601	800
Indien	520	549	516	509	731
Iran	620	982	674	317	185
Ägypten	836	1216	773	634	700
Argentinien	163	283	365	364	638
Libanon	167	299	312	778	312
Malaysia	29	76	167	236	234
Algerien	66	134	136	173	225
Afghanistan	55	173	123	134	210
Marokko	115	105	86	143	146
Äthiopien	21	39	44	82	119
Tunesien	62	61	73	84	102

Key: Volume of trade with selected developing countries

Brazil, Syria, Iraq, Libya, India, Iran, Egypt, Argentina, Lebanon, Malaysia, Algeria, Afghanistan, Morocco, Ethiopia, Tunisia

IV



Warenumsatz mit ausgewählten kapitalistischen Industrieländern

	1976	1977	1978	1979	1980	Veränderung 1980 gegenüber 1979 in %	darunter Export	Import
	in Mill. Dev.-Kčs							
BRD	[illegible]	[illegible]	7677	[illegible]	[illegible]	+ 8,7	+22,5	− 7,3
Österreich	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	+25,7	+61,3	+12,3
Großbritannien	1339	2252	3606	[illegible]	2706	+30,5	+16,5	+41,7
Schweiz	1767	2163	[illegible]	2555	3577	+39,2	+68,5	+ 8,8
Italien	1306	1509	1524	1842	2136	+19,2	+27,6	+21,3
USA	1030	1078	1043	1878	2062	+ 3,8	+25,1	− 3,0
Niederlande	1346	1526	1614	1671	1881	+27,9	+38,8	+13,7
Frankreich	1517	1322	1673	1611	1723	+ 8,3	+12,7	+ 0,3
Belgien	903	1127	1099	1104	1304	+12,7	+11,6	+13,8
Kanada	613	363	296	889	1018	+14,5	− 9,2	+26,1
Schweden	776	813	913	567	1006	+ 0,2	+ 2,6	+ 9,6
Griechenland	366	636	521	615	708	+10,1	+11,6	+19,9
Finnland	384	300	614	652	802	+22,8	+27,6	+28,3
Japan	687	281	336	676	542	+12,7	− 8,3	+34,6
Dänemark	651	395	378	613	300	+11,3	− 3,9	+28,1
Australien	252	293	323	376	606	+ 8,8	+16,3	+ 6,8
Norwegen	373	303	373	296	354	+32,1	+30,5	+47,0

Key:

Volume of trade with selected capitalist industrial states

1976	1977	1978	1979	1980	Change in 1980 over in %	Export Portion	Import Portion

FRG, Austria, Great Britain, Switzerland, Italy, U.S., The Netherlands, France, Belgium, Canada, Sweden, Greece, Finland, Japan, Denmark, Australia, Norway

Außenhandel nach Ländergruppen

	1975	1976	1977	1978	1979	1980	Anteil 1971/75 in %	1976/80	1980 zu 1975 in %
	in Mill. Dev.-Kčs								
Umsatz	97 347	108 133	121 459	131 683	145 916	161 973	100	100	66,3
davon									
sozialistische Länder	68 775	77 897	86 953	96 740	104 528	113 188	69,4	71,5	64,5
darunter									
RGW-Länder	64 284	73 251	81 954	89 906	98 075	106 101	64,5	67,1	65,0
kapitalistische									
Industrieländer	21 734	23 646	25 612	27 283	32 159	37 210	23,2	21,8	71,5
Entwicklungsländer	6 838	6 861	8 889	8 651	9 138	11 675	7,4	6,7	67,8
Export	46 631	52 137	58 246	63 609	70 156	80 433	100	100	72,4
davon									
sozialistische Länder	33 377	38 701	42 789	46 800	50 587	55 974	70,3	72,3	67,7
darunter									
RGW-Länder	31 081	36 207	40 001	43 099	47 343	52 373	55,2	67,3	68,8
kapitalistische									
Industrieländer	9 234	9 502	10 734	11 606	13 904	17 062	21,1	15,6	88,3
Entwicklungsländer	4 019	3 934	4 722	5 343	5 665	7 017	8,6	11,3	74,6
Import	50 716	55 996	63 213	68 074	75 760	81 540	100	100	60,8
davon									
sozialistische Länder	35 398	39 106	44 135	48 963	53 775	57 214	68,5	70,6	61,6
darunter									
RGW-Länder	33 204	37 044	41 953	46 226	50 712	53 730	63,9	66,6	61,3
kapitalistische									
Industrieländer	12 499	13 963	14 883	15 617	18 225	19 880	25,3	24,0	58,9
Entwicklungsländer	2 819	2 937	4 177	3 306	3 750	4 450	6,2	5,4	58,3

Key:

Foreign trade with groups of countries

1975	1976	1977	1978	1979	1980	Share 1971/75 in %	1976/80	1980 to 1975 in %

Volume
of this
   socialist countries
   of these CEMA countries
   capitalist countries
   industrial countries
   developing countries
Export
of this
   socialist countries
   of these CEMA countries
   capitalist countries
   industrial countries
   developing countries
Import
of this
   socialist countries
   of these CEMA countries
   capitalist countries
   industrial countries
   developing countries

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CSO: 2300/294

GERMAN DEMOCRATIC REPUBLIC

ELECTRIFICATION PROGRAM OF RAILWAY SYSTEM ANALYZED

Cologne DEUTSCHLAND-ARCHIV in German Vol 14 No 5, May 81 signed to press 28 Apr 81 pp 487-505

['Analyses and Reports' feature article by Dr Hansjoerg F. Buck, economist, All-German Institute, Bonn: "Key Efficiency Efforts in the GDR Transportation System Up to 1985: Defusing the Energy Crisis by Accelerated Electrification of the Reichsbahn?"]

[Text] 1. GDR Transportation System Development Level with Special Emphasis on Railroads

At the end of 1978 and 1979, the track length of the GDR Railroad Line Network came to about 14,200 km. This means that we have 13.2 km of rail line for every 100 km^2. This dense network thus approximately corresponds to that of the FRG (1977 = 12.6 km per 100 km^2 including the lines of railroads not owned by the West German government). The quality of the track and the right-of-way development of course is considerably less in the GDR.

The lines of the GDR railroad daily handle about 7,200 passenger trains today, including more than 500 express and fast trains. Every day, an average of 3 million t of freight are being carried on the tracks of the GDR Railroad. The freight volume carried by the railroad per year since 1977 requires a rolling stock of 50 million car units for transport.

At this time there are about 470,000 persons[1] working in the various branches of the GDR transportation systems (railroads, motor transport, urban commuter traffic, inland navigation and maritime shipping, as well as civil aviation). Every day, more than 5 million workers use public transportation to travel to and from work, on recreation trips, and to attend athletic and cultural events.

2. Carrier Energy Consumption Figures

About 15 percent of the total energy volume generated in the GDR are used by the transportation system for transportation purposes[2]. The transportation industry is the chief consumer for diesel fuel. About two-thirds of the imported or domestically produced diesel fuels are going to the transportation industry (including factory transportation).

The diesel fuel consumption in the GDR transportation system presently is between 2 and 2.5 million t per year. In addition, the carriers annually require more than 500,000 t of hard coal to meet their own requirements[3].

The total annual fuel volume required in the case of diesel oil is broken down as follows over the various carriers: the chief consumer is motor transport with 53 percent; the railroad must get 35 percent of the total output and maritime shipping and inland navigation get 12 percent of the fuel volume produced. This distribution structure coincides with the specific energy consumption of the individual transportation system. For a transportation output of 1 million gross t-km, the GDR Railroad must spend an average of 6.5 t and the inland shipping units must use up to an average of 5.2 t of diesel fuel. In contrast, truck transportation requires 19.5 t of diesel fuel for the same transportation performance. The specific energy consumption for truck transportation thus is about three times higher than for the other two carriers.

3. Major Measures to Save Energy in Transportation Systems

On the basis of the continuing hefty increase in the price of petroleum on the world market and the CEMA market--something which has been going on since 1973-1974--the continually rising consumption of petroleum derivatives has become an oppressive expenditure burden for the GDR. In 1970, the GDR government trade monopoly was still importing a ton of crude oil at a price of 39 Valutamark (= 8.35 Transferable Rubles); in 1977 it already had to pay 233 Valutamark (= 49.89 Transferable Rubles) for the same quantity of oil (in other words, a five-fold price rise)[4]. The consequences of this enormous rise in import costs was illustrated by the East Berlin technical periodical DIE WIRTSCHAFT with the help of the following example:

"On the basis of foreign trade structure, expenditures for imports keep growing on an order of magnitude of billions of marks along with the rise in world market prices. For example, in 1979, compared to 1970, converted for the same quantity of crude oil, we must export three times as many machines, for coffee twice the number of trucks, for skins and hides twice the number of electric motors"[5].

The GDR economy's ever-growing petroleum requirements furthermore increasingly constitute a burden on the government foreign-exchange exchequer because the GDR must cover its oil consumption--which is not guaranteed by means of Soviet shipments and which it pays for through commodity deliveries--by means of additional purchases on the world market which must be paid for with convertible currencies.

During the new five-year plan (1981-1985) which has just started, the GDR government therefore plans noticeably to improve the efficiency of the transportation system by means of the following measures and at the same time drastically to reduce the energy consumption of the carriers:

1. Accelerated electrification of main lines of the railroad and increased transfer of transportation tasks so far handled by diesel locomotives to electric locomotives;

2. Commissioning of already closed railroad lines, to the extent that the age of lines so permits and to the extent that a resumption of traffic is practical for the sake of saving oil imports and foreign exchange;

3. Shift of as many freight shipments as possible from highway to rail through reduction in truck traffic in order to cut back fuel and lubricant consumption in the transportation system[6].

The government production combines and trade enterprises must thus, as of the autumn of 1980, stop all truck shipments over distances of more than 150 km and must shift those shipments to the railroads. Even in case of transportation distances of only 10 km, the railroads should handle the transportation of commodities if the place of shipment and the destination have a rail connection. Shipment of bulk goods by truck is generally forbidden as of 1 January 1981.

4. Crash programs for the establishment of "factory transportation pools" involving enterprises which are located in the same vicinity (in other words, formation of truck pools above the enterprise level) whose management is directed to coordinate the factory's own truck shipments in order to avoid deadhead runs, to determine short transportation routes, and to accomplish optimum loading of available transportation space (in other words, reducing the specific fuel consumption per ton-kilometer)[7].

5. Rigorous restriction of bus transportation in connection with long-distance travel by passengers. Moreover, railroad bus trips and commuter bus lines should be discontinued wherever this is possible without unacceptable difficulties in worker commuter travel and student commuter travel and where the railroads actually can handle the additional customers. Bus travel in the future should on a priority basis only handle feeder services for the railroads, for the rapid-transit lines, and for the streetcar lines[8].

6. All government enterprises, trade enterprises, and motor transport combines as of the end of 1980 will get fuel and lubricants only in return for a procurement certificate after the requirements and the utilization purpose for the desired allocations have first been examined by the government (in other words, fuel quotas).

In addition to the implementation of these reorganization goals, the GDR government has assigned the following specific tasks to the transportation industry for the new 1981-1985 five-year plan.

Performance Sectors	Planned Performance Increases by 1985 Compared to 1980 (1980 = 100)
1. Increase in number of passengers carried by public transportation system to	104%
2. Increase in passenger transportation performance to	105%
3. Increase of transportation volume carried by public carriers and factory transport to	109%
4. Increase in freight transportation output to	114%
6. Reduction in specific transportation expenditure by about	20%
6. Reduction of specific energy consumption[1]	
For railroads, by about	28%
In maritime transport by	10%

Performance Sectors	Planned Performance Increases by 1985 Compared to 1980 (1980 = 100)
In freight motor transport using diesel fuel by	7.5%
and	
For inland navigation by	6.9%[2]
7. Desired average increase in transportation industry labor productivity per year	2.4%
8. Reduction of specific carrier material consumption annually by	3-4%

1. The specific energy consumption tells us how much power is needed (current, diesel fuel, coal) to attain a certain transportation output, measured in millions of gross-ton-kilometers. For the definition of the other performance figures or index figures mentioned in this table see LEXIKON EISENBAHN, second edition, published by a group of authors, Transpress VEB publishers for transportation industry, East Berlin, 1973.

2. The reduction in the specific energy consumption, demanded for all carriers, would add to up to a saving of 3 million t raw brown coal.

3. If the desired productivity increase is achieved, that would correspond to a saving of more than 3 million working hours.

Source: see Rudolph Schulze (GDR Minister of Post Office and Telecommunications): "The Further Increase in the Contribution from Science to the Development of the Transportation and Communications System," WISSENSCHAFTLICHE ZEITSCHRIFT DER HOCHSCHULE FUER VERKEHRSWESEN "FRIEDRICH LIST," Dresden, No 1, 1981, pp 14-24; and Fritz Mueller: "Main Tasks for Research and Technology of Transportation System During the Period of 1981-1985," DDR-Verhehr, East Berlin, No 4, 1981, pp 114-119. See also Rainer Hopf: "GDR--Freight Transportation Back to the Rails," WOCHENBERICHT DES DEUTSCHEN INSTITUTS FUER WIRTSCHAFTSFORSCHUNG, Berlin, No 8, 1981, 19 February 1981, pp 83-89.

4. GDR Railroad Conversion to Diesel Locomotives (1956-1978)

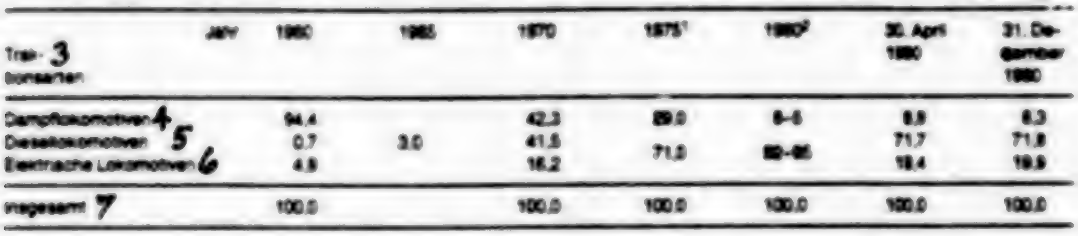
About two-thirds of the freight transportation volume (excluding maritime shipping) are today being handled in the GDR by the German Railroad[9]. Before going into the seventies, the railroad had to handle even considerably higher percentages of the daily transportation volume. In 1965, 80 percent of the freight transportation output were handled by railroad and in 1970 that carrier still had to handle about 70 percent of the domestic transportation requirements. The railroad's loss of significance since the sixties as a carrier is due to the fact that growing shares of the freight transportation volume were taken over by motor transport (including in-factory transport) or were shifted to pipeline transport.

In 1955, the GDR government decided, starting with the next five-year plan, to replace the steam locomotives gradually as traction machines and to switch to diesel locomotives instead. The diesel locomotives required for the conversion of the traction machine pool were to be imported mostly from the Soviet Union[10].

But because the expansion and rationalization of industrial capacities had strict priority, the resultant necessary neglect of required transportation facility construction (for example, the construction of modern railroad stations and switching stations), the neglect of transportation route construction, and the only inadequate modernization of rolling carriers, led to a situation where the exchange of traction machines and the general overhaul of the line network only made slow progress in the railroad.

In the 1971-1975 long-range plan, the GDR government had established the goal of so expanding the locomotive pool in diesel engines by 1975 that, starting in 1976, 83 percent of the required railroad traction output could have been handled by diesel locomotives[11]. In point of fact however the railroad management, using the diesel and electric locomotives made available to it by the end of 1975, was only able to handle 71 percent of the traction output which was necessary to handle the railroad's reliably guaranteed scheduled passenger traffic operations. Regarding the required traction performance for passenger transportation, the GDR railroad in the middle of the seventies still depended to the extent of not quite 30 percent on the services of the steam locomotives (see also Table 1)[12].

Table 1. Share of Various Types of Traction in Actual Train Movement Performance of Railroad, 1960-1980 (in %)



Jahr Traktionsarten 3	1960	1965	1970	1975¹	1980²	30. April 1980	31. Dezember 1980
Dampflokomotiven 4	94.4		42.3	29.0	5-8	9.9	8.3
Diesellokomotiven 5	0.7	3.0	41.5	71.0	92-95	71.7	71.8
Elektrische Lokomotiven 6	4.9		16.2			18.4	19.9
Insgesamt 7	100.0		100.0	100.0	100.0	100.0	100.0

Key: 1--Passenger transportation only; 2--Planned for the end of 1980; 3--Types of traction; 4--Steam locomotives; 5--Diesel locomotives; 6--Electric locomotives; 7--Total. Source: "The Passenger Transportation Performance in the GDR," DIE WIRTSCHAFT, No 6, 19 March 1975, p 17. Elfriede Rehbein: "Planned Cooperation of Inland Traffic for the Sake of Socialist Economic Development," WISSENSCHAFTLISHE ZEITSCHRIFT DER HOCHSCHULE FUER VERKEHRSWESEN "FRIEDRICH LIST," Dresden, No 2, 1980, pp 281-290. O. Arndt, "The GDR Transportation System during the Second Half of the Seventies," EISENBAHN-JAHRBUCH 1977, East Berlin, 1977, p 17; "Facts and Figures: on 'Day of the Railroad Worker' and 'Day of the Transportation Worker' on 8 June 1980," PRESSE-INFORMATIONEN, published by the press office attached to the chairman of the GDR Council of Ministers, No 63 (4893), 29 May 1980, pp 5-6. Hubert Egemann, director, transportation and communications department of the SED Central Committee: "Efficient Transportation Helps Lowering Production Consumption," DIE WIRTSCHAFT, No 3, 19791, p 15.

According to the latest official survey of 31 December 1980, the train movement work in the GDR Railroad is distributed over the individual types of traction as follows: the contribution from steam locomotives to the overall output has shrunk to about 8 percent. The bulk of the required train movement performance must today be provided by diesel locomotives (≈ 72 percent). In contrast, it was impossible during the seventies to achieve a considerable increase in the use of electric locomotives for transportation functions. On 31 December 1970, the share of electric traction out of the total train movement output came to about 16 percent. Just 10 years later, that output share did not grow to any major extent. On 31 December 1980 it was only 4 percentage points more than at the end of 1970 (see Table 1).

Although the transportation service requirements leveled upon the railroad rose rapidly during the sixties and seventies[13], there is every indication that the GDR was able to renew and expand the line network of the railroad, the railroad stations and switching stations (junction stations, marshalling yards) and the railroad loading facilities only to a comparatively modest degree. The GDR thus is the CEMA country whose tracks during the period of 1965-1979 shrank most as a result of shutdowns and line closings. At the end of 1979, the railroad only had 89 percent of the track available which it was able to use in 1965 (see Table 2). This net reduction in track length is certainly not due only to the deliberate closing of lines in order thus to increase the efficency and economical operation of railroad transport. An important cause of the shrinkage of the line network would also seem to be represented by the fact that, due to the lack of investment funds for the renewal of rail sections in need of repair, certain railroad lines had to be abandoned.

Table 2. Increase or Decrease of Railroad Tracks in CEMA Countries, 1965-1979. Status as of 31 December

Jahr 1	2 UdSSR	3 Polen	4 Bulgarien	5 Rumänien	6 ČSSR	7 Ungarn	8 DDR
			9 Schienenstrecken in km				
1965	131 388	26 862	4 094	10 979	13 301	9 850	15 950
1979	141 125	27 271	4 341	11 113	13 142	8 039	14 164
Zu- oder Abnahme 10 der Schienenwege in km von 1965 bis 1979 (netto)	+9 737	+409	+247	+134	−159	−1 811	−1 786

Key: 1--Year; 2--USSR; 3--Poland; 4--Bulgaria; 5--Romania; 6--Czechoslovakia; 7--Hungary; 8--GDR; 9--Track in km; 10--Increase or decrease in track length, in km, 1965-1979 (net). Source: STAT. JAHRB. DER MITGLIEDSLAENDER DES RGW [CEMA Member Nation Statistical Yearbook], published by the CEMA Secretariat, Moscow, 1979, p 311 f., and Moscow, 1980, p 275 f.

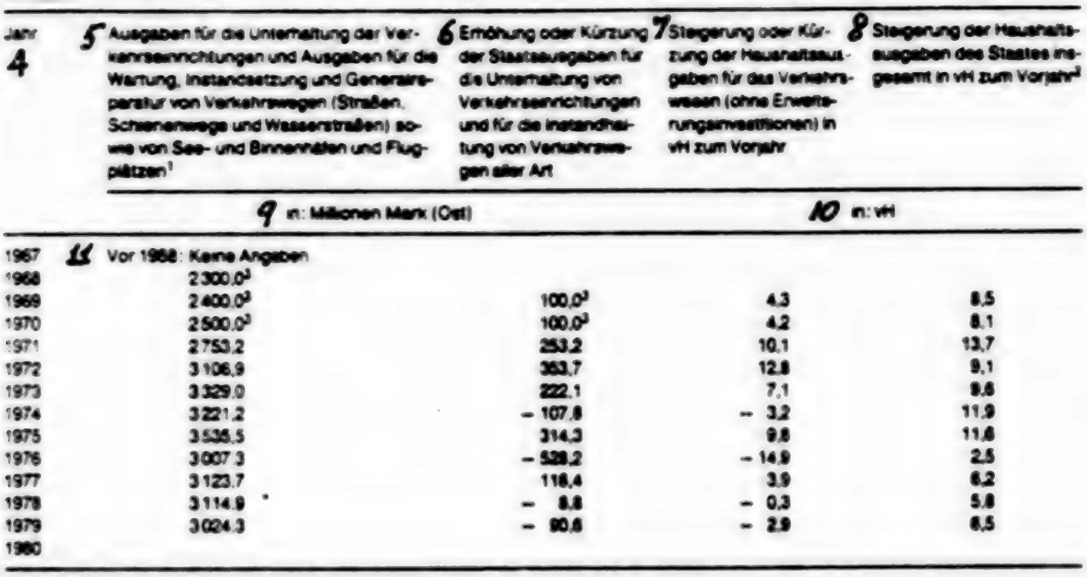
From the rather scant official reports one can calculate that during the period of 13 years from 1966 until 1978 about 1,850-1,900 km of track were newly built (in other words, averaging 144 km per year)[14]. This new construction volume during the same period of time is offset by a gross loss of about 3,600 km of track.

Investment measures intended to improve rail traffic were concentrated almost exclusively on the double-track expansion of the main lines in order to increase the line handling speed and to step up the travel speeds on the trunk lines[15].

In the GDR, the planned and actual figures for the revenue and expenditure calculations in the government budget are mostly secret. In spite of this general information gag, there are however several sectors in economic and community life --for example, the sector of industry and the social welfare and health system--

whose financial relationships to the government budget are being reported relatively in detail. But the information situation is particularly poor regarding the financial allocations given by the government to the transportation industry. Here, secrecy is very strict. In addition to the armament industry and the military establishment, the GDR transportation industry is that sector of government management activity for which data on the amount of expenditure for individual carriers and utilization purposes can be determined only to a very poor extent. This is why we can presently come up only with a time series on the overall development of the GDR unit budget expenditures for the current maintenance of the enterprises and installations of all carriers and for the maintenance and repair of existing transportation routes of all kinds. But this expenditure series alone clearly documents the fact that the transportation system as a whole during the seventies almost constantly was among the neglected sectors of the economy[16]. With the exception of 1972, during all years, between 1971 and 1979, the total expenditures in the GDR unit budget rose faster than the expenditures for the maintenance and overhaul (makeup of worn-out components plus replacement procurements) of the transportation enterprises and transportation routes (see Table 3). During 1976-1979, the government in East Berlin did not allocate any more budget funds for the financing of these tasks than were spent back in 1972 for these purposes. This stagnation in fund allocation is surprising above all because there is a great makeup need in the GDR in terms of repair and renewal measures for transportation routes and transportation installations. This need arose above all because (with the exception of oversees ports and maritime shipping) the GDR transportation system as a whole during the fifties and sixties was treated rather like a step-child when it came to the allocation of investment funds.

Table 3. GDR Public General Budget Expenditures for Transportation System, 1968-1979
(Government Expenditures by Central Government, Bezirks, Kreises, and Communities)



Jahr 4	5 Ausgaben für die Unterhaltung der Verkehrseinrichtungen und Ausgaben für die Wartung, Instandsetzung und Generalreparatur von Verkehrswegen (Straßen, Schienenwege und Wasserstraßen) sowie von See- und Binnenhäfen und Flugplätzen[1]	6 Erhöhung oder Kürzung der Staatsausgaben für die Unterhaltung von Verkehrseinrichtungen und für die Instandhaltung von Verkehrswegen aller Art	7 Steigerung oder Kürzung der Haushaltsausgaben für das Verkehrswesen (ohne Erweiterungsinvestitionen) in vH zum Vorjahr	8 Steigerung der Haushaltsausgaben des Staates insgesamt in vH zum Vorjahr[2]
	9 in: Millionen Mark (Ost)		10 in: vH	
1967	11 Vor 1968: Keine Angaben			
1968	2 300,0[3]			
1969	2 400,0[3]	100,0[3]	4,3	8,5
1970	2 500,0[3]	100,0[3]	4,2	8,1
1971	2 753,2	253,2	10,1	13,7
1972	3 106,9	353,7	12,8	9,1
1973	3 329,0	222,1	7,1	9,6
1974	3 221,2	− 107,8	− 3,2	11,9
1975	3 535,5	314,3	9,8	11,6
1976	3 007,3	− 528,2	− 14,9	2,5
1977	3 123,7	116,4	3,9	6,2
1978	3 114,9	− 8,8	− 0,3	5,8
1979	3 024,3	− 90,6	− 2,9	6,5
1980				

Key: 1--Excluding net investments for construction of new transportation installations (= new railroad stations, new superhighway gas stations, etc.) and new transportation routes (= new right-of-way, new superhighways, etc.); 2--The calculated increase rates in the GDR public general budget are based on the sum of all budget expenditures for the individual years, excluding the contribution revenues from social security and excluding cash carryover; 3--Estimated; these data among other things include the following expenditures for the highway system (care and maintenance of roads of all kinds): 1968 = 1,108.8; 1969 = 1,372.7; and 1970 = 1,539.3 million East Marks; 4--Year; 5--Expenditures for maintenance of transportation installations and expenditures for repair and general repair of transportation routes (highways, railroad tracks, and waterways) as well as maritime and inland ports and airports[1]; 6--Increase or reduction in government expenditures for maintenance of transportation installations and for repair of transportation routes of all kinds; 7--Increase or reduction in budget expenditures for transportation systems (excluding expansion investments) in % compared to the preceding year; 8--Increase in government expenditures, total, in %, compared to preceding year[2]; 9--In millions of East Marks; 10--In %; 11--Prior to 1968: no data.

The still existing makeup requirements in terms of repairs and maintenance as well as renewal investments also is indicated by the distribution of budget funds shown over the various transportation industry utilization purposes--a distribution which was made in 1978 (see Table 4).

Table 4. Distribution of Budget Expenditures for Transportation Industry Tasks in 1978

Transportation industry utilization sectors and utilization purposes	Expenditures in millions of East Marks	Share of expenditures for individual utilization sectors and utilization purposes in %
Expenditures for maintenance of transportation installations of all kinds and for repair and renewal of transportation routes	3,115	100
Including		
Expenditures for railroads (excluding expansion investments)	1,100	35
Including expenditures for repairs of right-of-way and tracks	740	24
Expenditures for highway repair	1,700	55

Source: explanations for budget calculation of GDR Council of Ministers for the People's Chamber for FY 1978.

In terms of transportation policy, the decision, made during the middle of the fifties, to convert the traction machine pool of the railroad from steam locomotives to diesel-oil-powered locomotives, was entirely in line with convincing concepts of practical operation. Starting with the oil prices at that time, the GDR transportation policy was able to build on the idea that the operation of the new traction machines would cause only comparatively minor fuel costs. As a result of the conversion, it was possible to reduce the absolute energy consumption of the railroads (measured in kilojoule per gross-ton-kilometer). In this connection GDR Deputy Transportation Minister Schmidt provided the following figures in August 1980:

"Between 1970 and 1978, for example, we in the GDR increased the transportation output for freight (excluding maritime transportation) by 36 percent, for passengers by 29 percent, and we reduced the absolute energy consumption by about 8 percent in that connection. The traction conversion, in other words, the replacement of steam locomotives, took the lion's share in this result[17].

Another advantage of this conversion consisted in the fact that the railroad, as a part of continuing conversion, needed to bring in less and less freight-space-intensive coal and coke quantities to meet its own requirements from the USSR, from Poland, and from domestic mines and to transport those quantities to the supply depots; as a result of that it was possible to relieve the already overtaxed transportation capacity of the GDR Railroad.

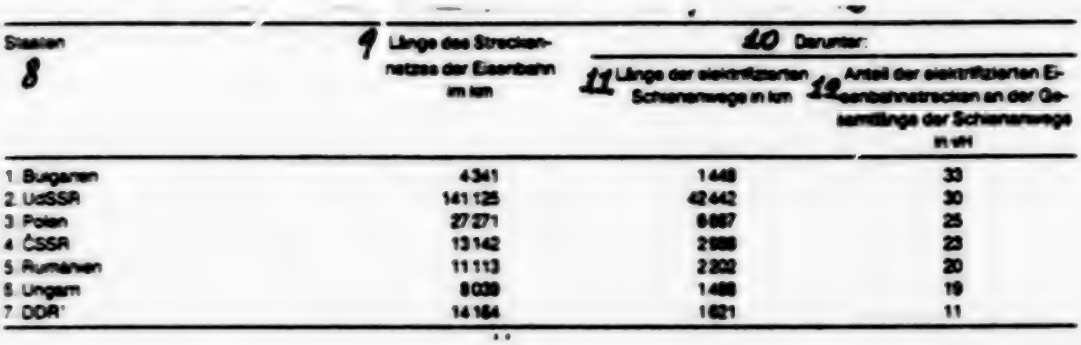
In contrast to what happens when we convert to railroad operations using electric locomotives (electrification of rail transport), the modernization measure selected caused only comparatively low investment costs. If the GDR government during the second half of the fifties or during the sixties had decided energetically to push the electrification of the main lines of the GDR Railroad, then the attainment of this goal would have gobbled up a considerable portion of the annual investment funds which then would have had to be used for the procurement of lattice towers, overhead contact lines, signal and safety systems, track-model switching stations, current supply stations and traction vehicles and for the construction of longer bridges and track foundations. Since the expansion of industrial capacities (chemical industry, steel production, machine-building, electrotechnology, electronics, vehicle construction) was considered to be much more important and was pushed, no funds were available for comprehensive electrification projects (including foreign-currency reserves). In addition we have the fact that the GDR, in view of its many decades of chronic energy shortage, would not have been in a position at all to guarantee the current supply for a large number of electrified lines (above all in the winter) in short-range or medium-range terms. This is why, prior to any electrification of the main line network, with a length of 7,600 km, it would first of all had been forced to undertake expensive expansion of the power plant capacities which were too small and it would furthermore have been forced to take care of a considerable increase in brown coal mining. Because of these difficulties, there was no electrification of the main trunk lines in the GDR with the exception of a few intensively used short sections.

5. GDR--Caboose at the End of the Electrification of Tracks in Eastern and Western Europe

In the socialist economic alliance, the GDR presently is the caboose in the train of electrification by domestic railroad lines. Only 11 percent of the existing line networks have been electrified so far (see Table 5). In the CEMA, Bulgaria with 33 percent and the Soviet Union with 30 percent show the highest shares of electrified tracks.

Out of the 1,621 km of tracks--which according to data from the people in East Berlin and CEMA statistics had been electrified by the end of 1979 in the GDR--during the same year however only 1,292 km were included in the electrified line network of the railroads. The remaining 329 km of track under wire involved the lines inside factories which were being used by the factory railroads of the big combines. For example, the big combines in the brown coal and potash mining industry of the GDR are operating a rather far-flung factory railroad network with a corresponding traction machinery and freight car stock. The power supply for these factory railroad networks is handled almost exclusively by the power plants of the combines themselves.

Table 5. Length of Tracks of CEMA Countries and Share of Electrified Rail Lines in 1979



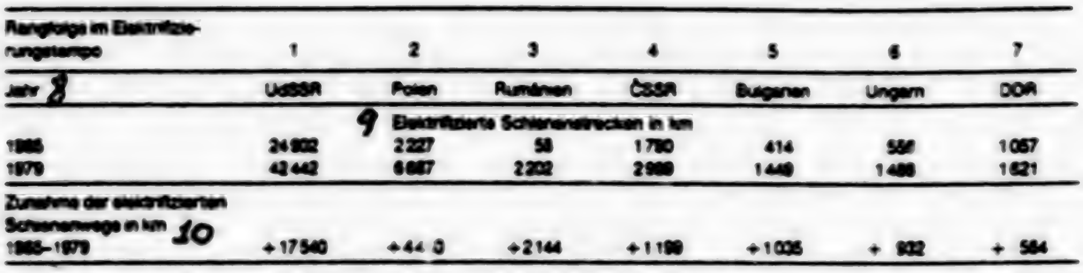
Staaten 8	9 Länge des Streckennetzes der Eisenbahn im km	10 Darunter:	
		11 Länge der elektrifizierten Schienenwege in km	12 Anteil der elektrifizierten Eisenbahnstrecken an der Gesamtlänge der Schienenwege in vH
1 Bulgarien	4341	1448	33
2 UdSSR	141 125	42442	30
3 Polen	27 271	6887	25
4 ČSSR	13 142	2988	23
5 Rumänien	11 113	2202	20
6 Ungarn	8030	1488	19
7 DDR¹	14 184	1621	11

Key: 1--Bulgaria; 2--USSR; 3--Poland; 4--Czechoslovakia; 5--Romania; 6--Hungary; 7--GDR^1; 8--Countries; 9--Length of railroad line network, km; 10--Including; 11--Length of electrified tracks, km; 12--Share of electrified railroad lines out of total track length, %. (1) Including the electrified line network of the factory railroads of the big combines in the GDR with a length of 392 km; source: STATISTISCHES JAHRBUCH DER MITGLIEDSLAENDER DES RGW, published by the CEMA Secretariat, Moscow, 1979, pp 311-312, and 1980 edition, Moscow, 1980, pp 275-276; FAHRT FREI (Journal of the Railroad Workers) of the GDR No 3, 1981, pp 6-7.

If we disregard the electrified line network of the GDR factory rail lines, then, at the end of 1980, only about 9.4 percent of the railroad tracks had been converted to electrical operation. This corresponds to a total electrified distance of 1,305 railroad line kilometers[18].

The GDR continues to limp along behind the construction and modernization work of the other CEMA countries also regarding the tempo of right-of-way electrification. The leaders in rail line conversion to electrical railroad operations in the CEMA are the USSR, Poland, and Romania. The gap which has developed in the electrification tempo between the GDR and the CEMA countries over the past 14 years can be determined by the fact that only a little more than one-tenth of the line was electrified, in the GDR between 1965 and 1979, which during the same period of time was converted to electrical operations in Poland, a neighboring country (See Table 6).

Table 6. Tempo of Track Electrification in CEMA Countries, 1965-1979
Status as of 31 December

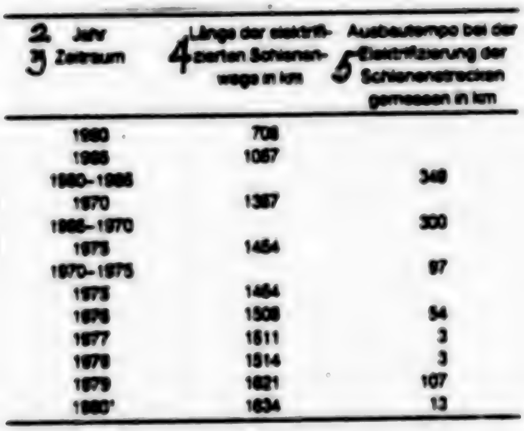


Rangfolge im Elektrifizierungstempo	1	2	3	4	5	6	7
Jahr 8	UdSSR	Polen	Rumänien	ČSSR	Bulgarien	Ungarn	DDR
	9 Elektrifizierte Schienenstrecken in km						
1965	24902	2227	58	1780	414	556	1067
1979	42442	6667	2202	2979	1449	1488	1621
Zunahme der elektrifizierten Schienenwege in km 10 1965–1979	+17540	+4440	+2144	+1199	+1035	+ 932	+ 554

Key: 1--USSR; 2--Poland; 3--Romania; 4--Czechoslovakia; 5--Bulgaria; 6--Hungary; 7--GDR; 8--Year; 9--Electrified rail line in km; 10--Increase in electrified rail line in km, 1965-1979. Source STATISTISCHES JAHRBUCH DER MITGLIEDSSTAATEN DES RGW, published by the CEMA Secretariat, Moscow, 1979, pp 311-312 and 1980 edition, Moscow, 1980, pp 275-276.

The tempo of rail line electrification in the GDR from one five-year plan to the next has been slowing down since the beginning of the sixties (see Table 7). Between 1971 and 1975, the GDR transportation industry merely managed to convert a line section of 97 km to electrical operation. The modernization attempts reach their absolute low point however in 1977-1978. According to official data from the CEMA secretariat in Moscow, the GDR during those two years merely managed to increase the electrified lines by 6 km (see Table 7).

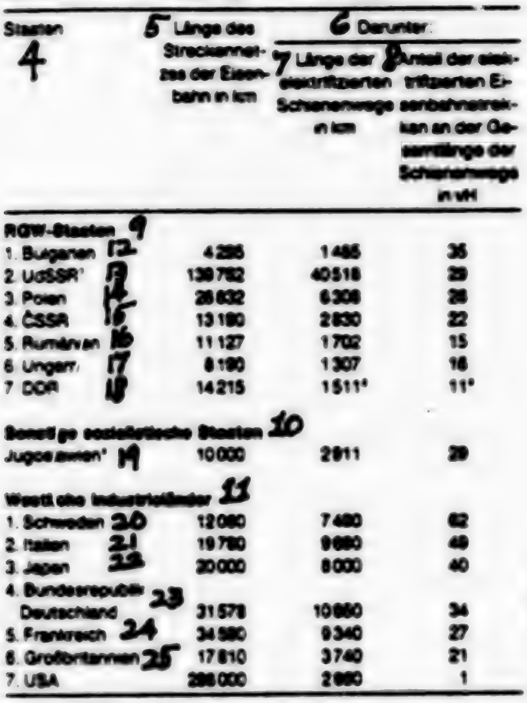
Table 7. GDR Rail Line Electrification Tempo, 1960-1980



2 Jahr 3 Zeitraum	4 Länge der elektrifizierten Schienenwege in km	5 Ausbautempo bei der Elektrifizierung der Schienenstrecken gemessen in km
1960	708	
1965	1067	
1960–1965		349
1970	1367	
1965–1970		300
1975	1454	
1970–1975		97
1975	1464	
1976	1508	54
1977	1511	3
1978	1514	3
1979	1621	107
1980*	1634	13

Key: 1--Preliminary results; 2--Year; 3--Time span; 4--Length of electrified tracks, km; 5--Rail line electrification development tempo, km. Source: STATISTISCHES JAHRBUCH DER MITGLIEDSSTAATEN DES RGW, published by CEMA Secretariat, Moscow, 1979, pp 311-312; and 1980 edition, Moscow, 1980, pp 275-276. "How Can One Transport Passengers and Freight with Less Energy?" NEUES DEUTSCHLAND, 7 August 1980, p 3; "The Tasks of the Transportation Industry in 1980" (daily report), DDR-VERKEHR, No 4, 1980, pp 112-115, and FAHRT FREI (Journal of the GDR Railroad Workers), No 3, 1981, pp 6-7, and No 5, 1981, pp 6-7.

Table 8. Length of Tracks in CEMA Countries and Some Selected Western Countries and Share of the Particular Electrified Rail Lines out of the Total Line Network Status as of 31 December 1977



Staaten 4	5 Länge des Streckennetzes der Eisenbahn in km	6 Darunter: 7 Länge der elektrifizierten Schienenwege in km	8 Anteil der elektrifizierten Eisenbahnstrecken an der Gesamtlänge der Schienenwege in vH
RGW-Staaten 9			
1. Bulgarien 12	4 295	1 485	35
2. UdSSR[1] 13	138 782	40 518	29
3. Polen 14	26 832	6 308	23
4. ČSSR 15	13 180	2 830	22
5. Rumänien 16	11 127	1 702	15
6. Ungarn 17	8 190	1 307	16
7. DDR 18	14 215	1 511[2]	11[2]
Sonstige sozialistische Staaten 10			
Jugoslawien[3] 19	10 000	2 811	28
Westliche Industrieländer 11			
1. Schweden 20	12 080	7 480	62
2. Italien 21	19 780	9 680	49
3. Japan 22	20 000	8 000	40
4. Bundesrepublik Deutschland 23	31 578	10 860	34
5. Frankreich 24	34 580	9 340	27
6. Großbritannien 25	17 810	3 740	21
7. USA	298 000	2 880	1

Key: 1--According to Soviet data, steam locomotives in 1954 still accounted for 94.6 percent of all traction work done by the USSR state railroads. Only 5.4 percent of the needed transportation power was supplied during that year by modern types of traction (diesel and electric traction); 27 years later, in 1977, the state railroads had managed to replace steam locomotives entirely with modern types of traction in railroad operations; in 1977, almost 50 percent of the total train traction output was produced on the previously electrified lines; 2--Including the electrified tracks of the factory rail lines of the government enterprises with a length of more than 300 km; excluding the electrified sections of the factory rail lines, the share of the GDR railroad lines converted until then came to only 8.5 percent in 1977; 3--Status as of the end of 1979; the Yugoslav government planned to electrify about 50 percent of the line network by the end of 1985. Sources: STATISTISCHES JAHRBUCH DER RGW-STAATEN, published by CEMA Secretariat, Moscow, 1979, pp 311-312; and 1980 edition, pp 275-276; STATISTISCHES JAHRBUCH DER DDR 1978, p 194; STATISTISCHES JAHRBUCH DER BUNDESREPUBLIK 1979, p 270; Technical Journal DIE WIRTSCHAFT, No 4, 1979, p 32; FRANKFURTER ZEITUNG, "Looking at the Economy," 17 May 1980, p 2; Roland Erdmann, "National Economic Effectiveness of Traction Conversion in Soviet Union," SCHIENENFAHRZEUGE, East Berlin, No 6, 1980, pp 271-273; and FAHRT FREI (Journal of the GDR Railroad Workers), No 3, 1981, pp 6-7; 4--Countries; 5--Length of Railroad track network, km; 6--Including; 7--Length of electrified tracks, km; 8--Share of electrified railroad sections out of total trackage, %; 9--CEMA countries; 10--Miscellaneous socialist countries; 11--Western industrial countries; 12--Bulgaria; 13--USSR[1]; 14--Poland; 15--Czechoslovakia; 16--Romania; 17--Hungary; 18--GDR; 19--Yugoslavia[3]; 20--Sweden; 21--Italy; 22--Japan; 23--FRG; 24--France; 25--Great Britain.

After the complete stoppage of electrification attempts in 1977-1978 and the extremely moderate modernization successes during the years after 1970, the GDR for the first time in 1979 again managed to electrify a noteworthy portion of the domestic trackage by concentrating investments on main lines which were in need of overhaul and through numerous crash programs in specific places. On the whole, it was possible to open line sections with a length of 107 km for electrical operation (see Table 7). Considering this outstanding result for 1979, the GDR between 1976 and 1979 converted an average of 42 km of rail line per year to electrical operation[19].

A comparison with the degree of electrification of the railroad networks in the Western European countries likewise showed that the GDR is still a developing country in this area. Even in Great Britain--which, among all Western European countries, so far has converted its railroad operations to electrical traction to the least degree --the share of electrified lines out of the total line network is twice as great as in the GDR (see Table 8).

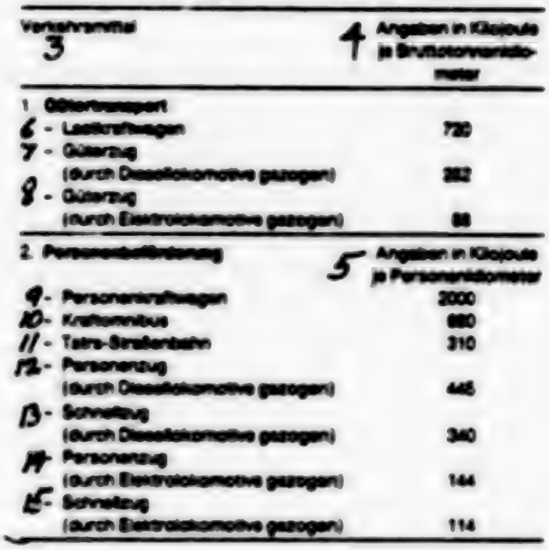
6. Central Goal of Transportation Policy under New Five-Year Plan for the Electrification of 730 km Railroad Line by 1985

Since the energy costs for railroad lines pulled by diesel locomotives have risen tremendously (fuel costs, lighting costs, heating costs) "the prerequisites are being created for a faster electrification tempo in the German Railroads in 1981-1985 in the transportation industry and in other sectors of the national economy"[20] (according to official government statements). In a report delivered to leading transportation industry officials in February 1980 in Gotha, Transportation Minister Otto Arndt mentioned the stepped-up conversion of the GDR Railroad to electrical operation as the central task in the GDR Railroad system for the eighties. The cadre directive contains the following passage:

"Electrification is and remains the most important rationalization measure of the DR [German Railroad] for the next several years in order to meet the growing transportation tasks coupled with a simultaneously declining expenditure of primary energy by about 20 percent and a reduction of the manpower expenditure by about 10 percent by the year 1985. On the basis of the high energy efficiency of electrical traction and the fact that domestic construction capacities and locomotives made in the GDR can be used, the tempo of electrification must be speeded up considerably. Our considerations at this time are aimed at speeding up the work to connect our capital to the electrified line network from Halle and Dresden and to continue the electrification effort toward the north in order thus to connect the Rostock overseas port as an important traffic junction point with a rapidly growing freight volume to the electrified railroad net. In that way we could have through-going electrical operation on two main trunk lines between Rostock and Bad Schandau and from Rostock all the way to Erfurt and that would enable us decisively to increase the capacity of those lines to handle traffic"[21].

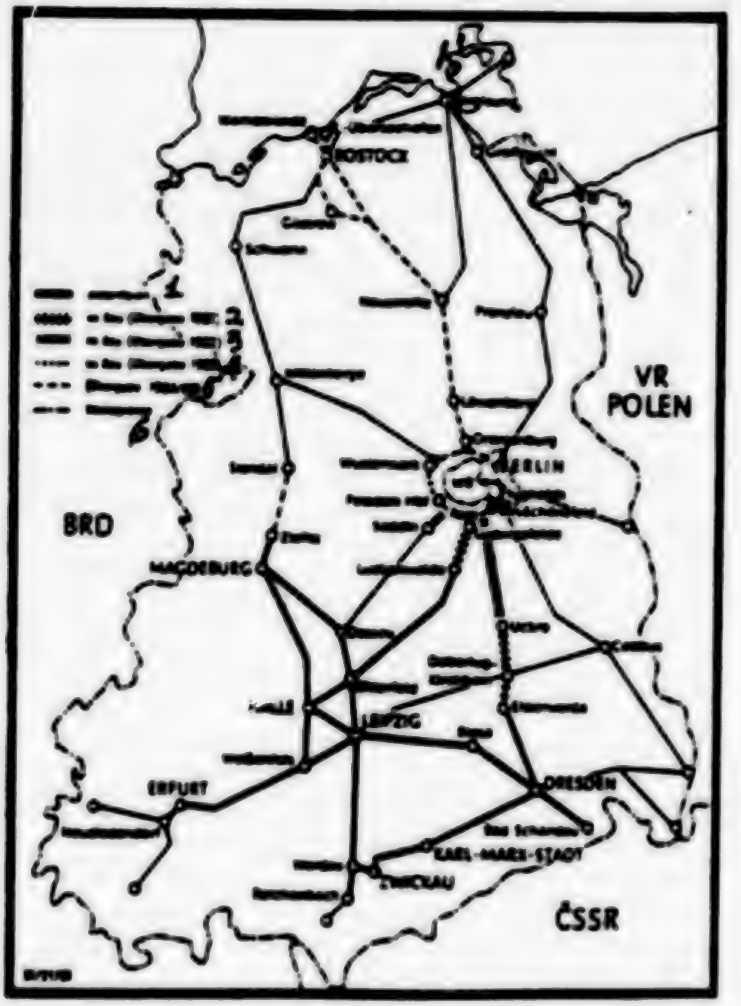
Scientific engineering and operations management studies prove that electrical train traction guarantees by far the most efficient energy utilization and a very reasonable cost for train operation. Judging by the specific energy consumption[22], the traction and transport output achieved by electric locomotives is superior to the output of all other means of transportation (see Table 9). This is partly due to the fact that, when we use electric traction vehicles, we can considerably increase the train performance compared to steam and diesel traction. Another advantage of this type of traction consists in the fact that the daily distance covered by the traction vehicles can be increased enormously. Electric locomotives, for example, in the Soviet state railroads, cover an average of 17 percent more line distance per day than diesel locomotives.

Table 9. Energy Consumption of Various Carriers Compared



Verkehrsmittel 3	4 Angaben in Kilojoule je Bruttotonnenkilometer
1 Gütertransport	
6 - Lastkraftwagen	720
7 - Güterzug (durch Diesellokomotive gezogen)	282
8 - Güterzug (durch Elektrolokomotive gezogen)	88
2. Personenbeförderung	5 Angaben in Kilojoule je Personenkilometer
9 - Personenkraftwagen	2000
10 - Kraftomnibus	880
11 - Tatra-Straßenbahn	310
12 - Personenzug (durch Diesellokomotive gezogen)	445
13 - Schnellzug (durch Diesellokomotive gezogen)	340
14 - Personenzug (durch Elektrolokomotive gezogen)	144
15 - Schnellzug (durch Elektrolokomotive gezogen)	114

Key: 1--Freight transportation; 2--Passenger transportation; 3--Means of transportation; 4--Data in kilojoule per gross t-km; 5--Data in kilojoule per passenger-km; 6--Truck; 7--Freight train (pulled by diesel locomotive); 8--Freight train (pulled by electric locomotive); 9--Passenger vehicle; 10--Bus; 11--Tatra streetcar; 12--Passanger train (pulled by diesel locomotive); 13--Express train (pulled by diesel locomotive); 14--Passenger train (pulled by electric locomotive); 15--Express train (pulled by electric locomotive). Source: Ministry of Transportation GDR.



Key: 1--Electrified; 2--Under construction, completion 1981; 3--Under construction, completion 1982; 4--Under construction, completion 1983; 5--Completion 1984-1985; 6--International boundary; BRD--FRG; VR--People's Republic; CSSR--Czechoslovakia.

The advantages listed here are confirmed by Western performance comparisons. According to data from the West German Federal Railroads, the operation and maintenance of diesel locomotives, roughly speaking, is twice as expensive as the use and maintenance of electric locomotives[23].

According to the East Berlin government's transportation policy plans, another 730 km of tracks are to be electrified during the new five-year plan of 1981-1985. The attainment of this goal presupposes that each year an average of 146 km of electrified rail line can be completed and placed in operation. The electrification program drafted for the new five-year plan (1981-1985) includes the establishment of continuing electrical connections between Halle/Leipzig--Berlin, Dresden--Berlin, Berlin--Rostock/overseas port, Rostock--Warnemuende, as well as Magdeburg--Stendal plus the connection of these already partly electrified lines to the already converted line network of the GDR Railroad[24].

In order to attain the "electrification of at least 730 km of heavily used lines" by 1985, the East Berlin economic leadership is apparently planning to increase the annual construction volume from year to year. Without this continuous increase in the development activity, it would be impossible to attain the five-year plan goal with a construction volume of 730 km of newly electrified rail line since the development goals for 1981-1982 are far too low. Deputy GDR Transportation Minister Guenther Knobloch had this to say at a meeting of party and railroad labor union cadre activists on 30 December 1980 in East Berlin:

"Our 1981 target is the commissioning of 72 km of electrified lines in the Luckenwalde--Ludwigsfelde and Elsterwerda to Uckro sections as well as the transformer plants in Doberlug--Kirchhain and Ludwigsfelde. At the same time we must create the prerequisites for opening up 110 km of electrified line in 1982. This means that, in 1981, in addition to the sections to be placed in operation, we must put the pylon foundations down on another about 140 line km and we must build the pylons on another approximately 100 line km and we must assemble about 300 km of chain systems"[25].

In 1980, the Transportation Ministry established a "electrification" department to improve investment planning and execution and to coordinate all management activities connected with electrification. Besides, the Presidium of the Council of Ministers in its 15 May 1980 resolution appointed a "government assistant for electrification of the German Railroad." This official among other things is to make sure that the resolutions of the Council of Ministers, which are required for the accelerated electrification of the line network, will be discussed with the necessary care in the party and government apparatus, that they will be properly prepared and that they will then be carried out with the necessary degree of urgency.

On 1 January 1980 a special plant for conversion work was furthermore established in the management sector of the GDR state railroad with the designation "electrification and engineering construction enterprise of the railroad." This enterprise is supposed to combine all conversion capacities gradually. Its tasks also include the construction of assembly vehicles and equipment as well as the production of rationalization equipment to facilitate the modernization investments and to reduce their costs[26].

The GDR hopes that electrification will above all lead to a reduction in expensive fuel imports and more productive energy-industry utilization of the still abundantly available domestic brown coal from which around 85 percent of the electric current generated in the GDR are so far being obtained[27]. According to the targets in the new five-year plan, the total of the rationalization and reform measures provided for in the transportation industry and partly already tackled is supposed to facilitate a reduction in the specific energy consumption of the German Railroad by 28 percent, in maritime transportation by 10 percent, in motor freight transportation by 7.5 percent, and in inland navigation by at least 7 percent. These savings correspond to an equivalent of 30 million t raw brown coal.

7. Planned Electrification Not Possible with In-House Resources

It would hardly seem possible to attain this objective with in-house resources. The following economic and technological obstacles and difficulties in the railroad and transportation sector alone are responsible for this.

1. In almost all line sections earmarked for conversion, it is necessary first of all to reinforce and renew the track bed, the bridge crossings, and the track foundation. Otherwise, the electric trains would not be able to use their possible advantageous running speeds and it would be impossible to achieve the desired faster "passage" of freight trains per line section and time unit on account of the risks connected with that.

Besides, tunnels must be made wider, highways and pedestrian bridges must be raised or tracks must be lowered, signal bridges and pipelines must be moved, platform roofs must be shortened protective devices in the safety area of overhead lines must be built and expensive transformer plants must be erected because they are needed to convert the railroad current from the current in the nationwide grid. In addition we have the following:

2. A part of the lines earmarked for electrification must first of all be provided with a second track and that considerably increases the investment costs of the modernization projects.

3. A considerable part of the transportation facilities of the GDR Railroads throughout the country (switching stations, signal systems, communications links, car cleaning and maintenance plants, railroad electric power plants, switch heating systems, etc.) is obsolete and the frequent repairs resulting from that condition are impaired by chronic spare parts shortages and are thus delayed in terms of time. Besides, the transloading and unloading work on the marshalling yards in the junction stations, and in the terminal stations is frequently insufficiently mechanized and that delays the processing of transportation space and slows down progress in the efforts to increase labor productivity.

4. The DR furthermore still suffers from a considerable shortage of required special transportation equipment and containers in rolling stock (for example, special tanks and container cars) so as to speed up, facilitate, and reduce the costs of handling special freight.

On account of these two last-mentioned bottlenecks, the economic management and the railroad management can concentrate the capital to be made available to the transportation system only to a limited degree on the electrification of rail lines because otherwise there would be highly disadvantageous effects in the other sectors of railroad operations and in the transportation industry as a whole. But even if this expensive investment task can be carried out by 1985, the GDR with a share of 15 percent of electrified line still represents the Caboose in this form of transportation system modernization in the CEMA and in Europe.

What additional GDR management weaknesses in the economy as a whole will make the implementation of the electrification goals presumably impossible--without any outside aid?

1. The GDR industry presently does not have the required capacities for turning out the entire range of capital goods required for conversion in terms of type and quantity, by itself. Besides, an overview of the development of production and export results for rail vehicles over the past 10-15 years shows that the GDR

industry has quite obviously reached the limits of its performance for these products and that major output increases to correct the bottlenecks in railroad transportation space presumably will not be possible in the foreseeable future. This is why the DR management has been trying since 1979 to purchase second-hand freight cars from the West German Railroad. In 1979 the East German Railroad procured about 2,000 open, two-axle freight cars from old West German inventory. Last year, another 800 open "sugar-beet cars" were purchased in addition and in 1981 the East Berlin economic management once again wants to obtain the same number of cars from the central West German Federal Railroad office in Minden.[28]

2. About 60 percent of the raw materials, which the GDR economy needs to make the quantity of goods and services produced during the year must be imported from abroad. This dependence in terms of raw materials and the progressing deterioration in the terms of trade due to the rapid rise in costs of energy sources and raw materials obtained abroad since 1975 have been exerting a still growing export compulsion upon the GDR economy. To meet the needs for energy and raw materials, the country must, also against its will, increase the export of finished goods (capital goods and consumer products) way above proportion. The forced exports reduce the domestic investment possibilities and deprive the consumer goods market of the higher quality demanded there in consumer goods.

Because these foreign-trade burdens will by no means become lighter by the middle of the eighties as far as the GDR is concerned but instead will presumably become much harder, the country will, during the five-year plan which has just started, also be forced to continue to sell rolling stock and capital goods for the railroads to the CEMA countries and to Western countries--in other words, the very type of equipment which is urgently needed to modernize the train operations of the East German railroads.

According to statements from the GDR Transportation Ministry on 30 December 1980, the DR, during the 1976-1980 five-year plan which had just ended, obtained 749 diesel and electric locomotives of all kinds. About 580 of those new traction vehicles according to preliminary data are imported diesel locomotives whereby 282 of these traction machines were procured from the Soviet Union. It follows from this that the GDR Railroad over the past 5 years was merely allowed to purchase about 160 new electric locomotives. With this additional number, the railroad management also had to fill all gaps which had arisen when old traction machines had to be taken out of the inventory.

Table 10. Production and Export of Selected Rail Vehicles and Miscellaneous Transportation Equipment by GDR Industry, 1965-1978[1]

5 Art der hergestellten Schienenfahrzeuge und sonstigen Transportmittel	1965	1970	1975	1976	1977	1978	6 Steigerung oder Rückgang der Produktion und des Exports im Jahre 1978 im Verhältnis zu 1970 in Prozent[4]
1. Diesel- und Elektrolokomotiven[2] 7	572	633	444	422	414	461	−27 vH
2. Eisenbahnpersonenwagen 8	1088	1519	1628	1720	1765	1521	+/−0 vH
3. Eisenbahngüterwagen 9	2172	5706	5047	5430	5587	5527	− 3 vH
Nachrichtlich: 10							
I. Produktionsziffern weiterer Transportmittel 11							
1. Lastkraftwagen 12	15179	24180	35845	35919	37228	38735	+53 vH
2. Omnibusse 13	542	2587	2485	2482	2707	2784	+ 8 vH
3. See- und Küstenfrachtschiffe 14	47	38	24	25	26	26	−32 vH
II. Export ausgewählter Schienenfahrzeuge und Transportmittel 15							
1. Reisezugwagen 15a	1068	1071	1115	1157	1148	1199	+12 vH
2. Lastkraftwagen[3] 16	6551	12276	24671	24221	21448	23489	+91 vH
3. See- und Küstenfrachtschiffe 17	27	41	25	23	21	23	−44 vH

Key: 1--In the GDR, the official statistics do not publish any data on the number of diesel and electric locomotives, railroad freight cars, and buses exported. This is why the production figures shown only give us a rough indication as to the possible inventory increase, for example, in selected rail vehicles. Moreover, the State Central Statistics Administration does not publish any time series regarding the annual inventory changes for the steam, diesel, and electric locomotives used in domestic train operations and on any changes in the rolling stock for freight cars and passenger cars (broken down by standard cars, special cars, sleeping cars, and dining cars). This is why unfortunately we cannot determine roughly how many locomotives and railroad cars the East Berlin economic leadership imported annually to supplement the railroad rolling stock or how many it was able to import on the basis of limited foreign exchange reserves. Due to these information gaps, we cannot come up with any precise data as to how the East German Railroad's transportation capacity for rolling stock of all kinds went up for example during the period of 1970-1980, per year; 2--During 1970-1978, the GDR procured the following numbers of diesel locomotives from abroad: 1965--72; 1970--37; 1975--182; 1976--142; 1977--100; 1978--122; 3--Including special trucks; 4--The determination of the increase or decline in the production and export performance here is made without considering the changes which took place during the period of the survey regarding the size of the utility value(yield/quality) and the price of the product types exported; 5--Type of rail vehicle made and miscellaneous transportation equipment; 6--Increase or decline in production and exports in 1978 compared to 1970 in %[4]; 7--Diesel and electric locomotives[2]; 8--Railroad passenger coaches; 9--Railroad freight cars; 10--Specifically; 11--Output figures for additional transportation equipment; 12--Trucks; 13--Buses; 14--Ocean-going and coastal freighters; 15--Export of selected rail vehicles and transportation equipment; 15a--Passenger motor coaches; 16--Trucks[2]; 17--Ocean-going and coastal freighters. Source: STATISTISCHES JAHRBUCH DER DDR 1974, pp 301 and 304; and 1979 edition, pp 119, 231-248, especially p 234; see also pp 193-203. vH--%.

From the transportation-industry data available for the period of the past 5 years, we can figure out that the GDR economy exported more than 90 percent of its diesel and electric locomotives made in 1976-1980 (totaling about 2,150 units) to foreign countries, primarily to the USSR and other CEMA countries. Although the GDR industry annually produces between 1,500 and 1,700 railroad passenger coaches, the East German Railroad over the past 5 years only got 1,658 new passenger motor coaches from the economic management to modernize its rolling stock. This again shows us that the GDR, due to the pressure of the foreign-trade burden, is presently forced to sell four out of every five annual output volumes of railroad passenger coaches during any specific period of the long-range plan to foreign countries. In conclusion, the following data show the investment bottlenecks which the GDR Railroad has to struggle against. Although a large portion of its safety, signal, and communications systems should urgently be exchanged and above all modernized, only 20 new track model plants have been installed for the entire train operation volume of the GDR railroad over the past 5 years between 1976 and 1980--that is to say, four during every year[29].

3. The foreign currency yield from Western exports and capital transfers is presently not enough to purchase the structural components and equipment needed for electrification from Western industrial economies especially since about 40 percent of the annual export earnings in terms of convertible currencies deriving from commodity shipments and license sales must be spent for debt servicing[30]. Apart from other loans from Western free-enterprise economies, there is therefore only the possibility of importing the missing capital goods from the Soviet Union and other CEMA countries and in return to make additional quantities of GDR commodities available which are particularly in demand. This however presupposes that, to meet this demand in the CEMA, unused production capacities are available and that the already heavily overtaxed export strength of the GDR will be sufficient to make additional quantities of export goods available so that the domestic output gaps in terms of railroad capital goods can be closed.

4. On the basis of the ambitious expansion and modernization plans for the USSR state railroad, Soviet industry has since the beginning of the seventies been constantly fully committed to the limit of its capacity for railroad equipment and rolling stock. According to the long-range plan targets for the tenth five-year plan, which ended on 31 December 1980, the Soviet state railroads were supposed to get 3,000 km of new rail lines, 2,800 km of second track on the most frequently used line sections, and more than 4,000 km of newly electrified tracks by the end of last year.

Looking at the planned construction results of 5,800 km of new tracks, the Soviet Union by the end of 1979 however had completed only a distance of 2,865 km[31]. Just one year prior to the end of the five-year plan, the target for the new construction of rail lines, contained in the long-range plan, has been attained only to the extent of 49 percent.

In the electrification of rail lines on the other hand the Soviet economic management was able to achieve better results by the end of 1979. During the 4 years of 1976-1979, a total of 3,519 km of railroad tracks were converted to electrical operation in the USSR[32]. If the Soviet economy in 1980 likewise managed to electrify about 1,300 km of rail line, as during 1979, then the economic planners in Moscow would have achieved the expansion and modernization goals in that field[33].

The considerably faster tempo of electrification of Soviet rail lines, as compared to the GDR, is determined and explained above all by the following special tasks which the railroad power grid and electric facilities of the state railroads (transformer plants, transformer stations, etc.) were assigned in the USSR in connection with the opening up of the eastern parts of the country.

At the end of 1975, more than 2,600 collective farms, more than 1,100 state farms, and about 1,800 industrial enterprises were supplied with electric energy from the railroad power grid in the Soviet Union. Overall, the state railroads had to supply more than 25 billion kwh to these energy consumers. This energy volume, which was just turned over, corresponds to the total annual energy generation in the Hungarian People's Republic or 26 percent of the electric energy generated in the GDR in 1978[34].

In addition to the above-mention ambitious expansion and modernization goals for the line network, the 1976-1980 plan period furthermore included a tremendous increase in the rolling stock of the Soviet state railroad. During the past five-year plan, the economic management wanted to make available to the railroads, from domestic production and imports, a total of 2,200 electric locomotives, 6,400 electric motor coaches, 2,500 switching locomotives, and more than 400,000 passenger coaches and freight cars--all of them new[35].

In view of these expansion goals, which will not turn out any more modest during the coming five-year plan (1981-1985) either, and keeping in mind the fact that the USSR is the biggest net importer of rolling stock in the CEMA, the chances for the GDR getting the desired number of railroad capital goods items from the USSR look relatively poor[36]. In addition there is the fact that the GDR until far into the eighties must anticipate a progressing deterioration in its terms of trade in dealing with the Soviet Union. The consequence is that it must supply the leading power in the CEMA with more and more industrial finished products (especially high-grade machinery and industrial equipment) in return for the same quantity of energy sources and raw materials procured. Because of the continually growing foreign-trade burdens--resulting from the price gap between the development of raw material prices, on the one hand, and the development of prices for industrial finished products, on the other hand, the import leeway of the East German economic management during the coming years will keep shrinking. In this tight situation one can hardly expect any help from the East. Because of the rigid bilateralism in trade relations between countries with government-controlled trade, the GDR cannot hope that it might be able considerably to overdraw its payment balance account in dealing with the Soviet Union[37]. From this situation analysis we can conclude that even the rather modestly designed electrification plans of the GDR Railroad are on rather shaky grounds.

FOOTNOTES

1. See Hubert Egemann, "The Transportation System's Contribution to the Further Accomplishment of the Primary Mission," EINHEIT, East Berlin, No 11, 1978, pp 1145-1151, specifically p 1147.

2. See the article entitled "On the Requirements for the Eighties: How Can One Transport More Passengers and Freight with Less Energy?" NEUES DEUTSCHLAND, 7 Aug 80, p 3.

3. See Hubert Egemann, "The Transportation System's Contribution to the Further Accomplishment of the Primary Mission," loc. cit., footnote 1, p 1146.

4. During the same period of time, the import prices for cocoa and coffee went up by about 500 percent and for nonferrous metals, cotton, and grain they went up about 300 percent for the GDR.

5. Concerning these data, see DIE WIRTSCHAFT, No 10, 1979, p 19.

6. See Klaus Otto (GDR Ministry for the Construction Industry): "Cooperation between Construction Industry and Transportation System," KRAFTVERKEHR, East Berlin, No 6, 1980, pp 274-275.
Guenther Knobloch (Deputy Transportation Minister): "Division of Labor, Production Cooperation, and Modern Technologies--Basis for Effective Transportation Work," DDR-VERKEHR, No 11, 1980, pp 364-366.
Heinz Schmidt (State Secretary in GDR Transportation Ministry): "Shifting Transportation from Highway to Rail," PRESSE-INFORMATIONEN, published by Press Office Attached to the Chairman of the GDR Council of Ministers, No 149, 4979, 18 December 1980, p 2.
"Rationalization in the Transportation System--Prerequisite for Greater Effectiveness," (conference report), DDR-VERKEHR, No 12, 1980, pp 400-404, specifically p 402.

7. See Gerhard Fiedler, "On the Effectiveness and Further Development of Factory Car Pooling," KRAFTVERKEHR, East Berlin, No 5, 1980, pp 217-219; "79 car pools in Rostock Bezirk," NEUES DEUTSCHLAND, 20 November 1980, p 2. In this connection, see the constructive analysis by Herman Wagener (professor, "Friedrich List" Transportation College): "Ways to Reduce Freight Transportation Expenditure," DIE WIRTSCHAFT, No 10, 2 October 1980, pp 16-17.

8. At the end of 1978, there were 17,350 bus lines with a total length of 610,000 km in bezirk-managed motor transport and in urban commuter transportation in the GDR. In urban commuter transportation alone at the same time there were 678 urban bus lines with a total length of 6,352 km. The vehicles used in bezirk traffic and in urban commuter traffic currently carry about 2 billion passengers. More than 23,000 buses are currently licensed in the GDR for urban and long-distance transportation (not including small buses). Most of them were imported from Hungary (Ikarus buses). The GDR today has a relatively dense network of bus lines so that almost every town in the country is included in network planning and line layout. See among other things the central

organ of the FDGB [Free German Labor Union Federation], TRIBUENE, 15 November 1977, article entitled "The Most Frequently Used Carrier (Buses Carry almost 2 Billion Passengers per Year)," NEUES DEUTSCHLAND, 7 February 1978, p 2 and STATISTISCHE JAHRBUCH DER DDR 1979, p 194 and pp 200-202.

9. Freight transportation performance measured in ton-kilometers. In 1976, the railroad's contribution to the total freight transportation volume (excluding maritime shipping) came to 68 percent; in 1977 it was 66 percent and in 1978 it was 65 percent. See STATISTISCHES JAHRBUCH DER DDR 1979, p 195.

10. From the "Voroshilovgrad Diesel Locomotive Works" production association alone the GDR procured 800 diesel locomotives since the end of the sixties. The locomotive delivered by this combine (Russian designation TE-109) is equipped with an AC and DC gear and with a four-stroke diesel with a capacity of 3,000 hp. Depending upon whether the freight train or passenger train version of the locomotive was ordered and depending upon the customer's choice, the traction machine can be designed for a planned speed of 100, 120, and 140 km/hr. In the GDR, these three modifications are designated 130, 131, and 132. As a function of the possible speed, the locomotive is equipped with electrodynamic brakes and electrical train heating. See Igor Sukhov: "The Export of Diesel Locomotives," in AUSSENHANDEL, published by the USSR Ministry of Foreign Trade, Moscow, No 1, 1981, pp 28-30.

11. See the "Law on the Five-Year Plan for the Development of the GDR National Economy, 1971-1975," dated 20 December 1971, GBL [Legal Gazette], Part I, No 10, pp 175 ff, specifically, p 185.

12. See "Performance Development in GDR Passenger Traffic," DIE WIRTSCHAFT, East Berlin, 19 March 1975, p 17.

13. The most important causes of the rapid expansion of the demand for railroad transportation services are as follows: (1) the increase in the transportation volume resulting from economic growth; (2) the need for transit shipments resulting from the GDR's central location in Europe (for example, the transportation of large containers in transit between Western Europe on the one hand and Poland and the Soviet Union on the other hand); (3) The rapidly growing number of foreign trade shipments on the basis of the constantly growing service exchange between countries with government-controlled trade (in other words, the effects of the desired socialist economic integration of the CEMA countries in one huge economic area). In the CEMA, the railroads in 1980 presumably will have to carry about 50 percent of the freight volume exchange in international trade among the CEMA countries. See among other things "Common Tasks of CEMA Countries in the Transportation Industry," DDR-AUSSBENWIRTSCHAFT, No 3, 18 January 1978, pp 1-2; "Freight Transports in Transit via the GDR Railroad Net," DDR-AUSSBENWIRTSCHAFT, No 26, 28 June 1978, p 15; Boris Busygin, "Modern OPW [Joint Freight Car Pool] Cars on Far-Flung Rail Net," (more freight transportation across international boundaries), NEUE ZEIT, East Berlin, 22 January 1979, p 5.

14. During the 1976-1980 five-year plan, 800 km of second tracks were supposed to have been laid according to the directives of the ninth SED Party Congress.

By the end of 1979, 655 km of that planned distance had been completed. See among other things "Line Network of the Railroads Becoming More Efficient," NEUES DEUTSCHLAND, 19 January 1978; "Development of GDR Railroad Lines Network --A Success Story," DDR AUSSENWIRTSCHAFT, No 1, 4 January 1978; "Another 160 km of Second Track," NEUES DEUTSCHLAND, 4-5 March 1978, p 3; "Facts and Figures: On the Occasion of 'The Day of the Railroad Workers' and on the Occasion of 'The Day of Transportation Workers' on 8 June 1980," PRESSE-INFORMATIONEN, published by the Press Office attached to the Chairman of the GDR Council of Ministers, No 63, 4893, 29 May 1980, pp 5-6.

15. Of the current figure of about 14,200 km of track, about 7,600 km are on the trunk lines. The remaining 6,600 km are secondary lines. About 80 percent of all transportation services performed by the East German railroads are rendered on the trunk lines. Consequently, the work load of the trunk lines is extremely heavy. About 40 percent of the main lines cannot be further burdened in the transfer of transportation missions. See the following sources: "Development of Railroad Line Network in the GDR--A Success Story," DDR AUSSENWIRTSCHAFT, No 1, 4 January 1978; and "The Line Network of the Railroad Is Becoming More Efficient," NEUES DEUTSCHLAND, 19 January 1978.

16. The downgrading of the transportation system when it comes to investment fund allocation, ordered due to a real capital shortage, did not extend to the construction and development of overseas ports (with emphasis on Rostock) and maritime shipping (creation of a government-owned merchant fleet).

17. See also "How Can One Transport More Passengers and Freight with Less Energy?" NEUES DEUTSCHLAND, 7 August 1980, p 3. If we base the determination of the output increases in the GDR transportation industry on the official data supplied by the 1971 issue of the Statistical Yearbook, then the freight shipments increase for goods (excluding maritime transportation) during the period between the end of 1970 and the end of 1978 would come to 39 percent instead of the 36-percent figure given.

18. See in this connection "Facts and Figures on Electrification" and "Triple the Electrification Pace" (reports and articles on efforts to convert the GDR Railroad to electric traction), FAHRT FREI, No 3, 1981, pp 6-7.

19. This figure extensively coincides with the statements made by Deputy Transportation Minister and State Secretary in the GDR Transportation Ministery Schmidt on 7 August 1980 in an interview. He said: "Between 1976 and 1980, we electrified an average of 40 km per year. In view of the energy industry aspects, the pace here should be stepped up." See the mentioned interview under the title "Concerning the Requirements for the Eighties--How Can One Transport More Passengers and Freight with Less Energy?" NEUES DEUTSCHLAND, 7 August 1980, p 3.

20. See "On the Requirements of the Eighties--How Can One Transport More Passengers and Freight with Less Energy?" NEUES DEUTSCHLAND, 7 August 1980, p 3.

21. See "The Tasks of the Transportation Industry in 1980" (report on a seminar with leading cadres in the transportation industry in Gotha on 21 and 22

February 1980), DDR-VERKEHR, No 4, 1980, pp 112-115, specifically, p 115.

22. The specific energy consumption of transportation carriers is in each case determined with reference to one t of cargo moved (including the weight of the vehicle) per km.

23. Of course, in comparing efficiency we must not overlook the fact that electric traction also requires a series of follow-up investments which due to the attendant additional expenditures somewhat reduce the advantages of this type of traction. That includes for example the fact that the switch to efficient electrical train operation for passenger and freight transportation calls for the lengthening of most train platforms and station tracks as well as a reorganization of the freight car pool from two-axle to four-axle, six-axle, and eight-axle cars.

24. See "Rationalization in the Transportation Industry--Prerequisite for Greater Efficiency in Transportation Work" (report on the transportation industry's rationalization conference on 22 October 1980 in Berlin), DDR-VERKEHR, No 12, 1980, pp 400-404, specifically 402; see also Eberhard Russek: "Trains on Trunk Lines under Long Wire," NEUES DEUTSCHALND, 29 October 1980, p 3.

25. See Guenther Knobloch, "Reduce Expenses, Increase Efficiency," FAHRT FREI, East Berlin, No 1, 1981, p 7; see also "Railroads Quickly Electrifing Network," NEUES DEUTSCHLAND, 27 January 1981, p 2.

26. See the report by GDR Transportation Minister and German Railroad General Manager Otto Arndt on the topic "Implement the Electrification Decision with a High Level of Party Orientation and Consistency," FAHRT FREI, No 3, 1981, p 6.

27. According to official data, the GDR presently has raw brown coal deposits amounting to 18-20 billion t. By 1990, the annual mining volume is to be increased by one-fifth to a figure of 300 million t. To achieve this extraction volume, it will be necessary to open up a total of 21 new strip mines. See NEUES DEUTSCHLAND, 4 June 1980.

28. According to official data from the West German Federal Central Railroad Office, the open freight cars sold as a rule are between 30 and 40 years old and can no longer be economically utilized on the lines of the West German Federal Railroad. The GDR needs the car type purchased above all to transport brown coal, concrete gravel, limestone, crushed rock, fine gravel, sand, and other construction materials. About 18 percent of the freight transported annually by the East German Railroad consists of construction materials (excluding cement and lumber). If we add these two types of freight, then the freight volume carried by the railroads in the GDR will be made up to the extent of 24 percent of raw materials in the broader sense. Judging by the transportation volume in tons, the transportation of coal, coke, and construction materials requires 53 percent of the East German Railroad's transportation capacity. Without the re-use of cars taken out of the inventory of the West German Federal Railroads, the GDR economy and transportation managers would not

be able to divert at least a part of the construction material shipment volume from the highways and carry it by rail (the idea being to cut down truck transportation to save fuel and lubricants made from oil). See the report entitled "West German Federal Railroad: 'GDR' Interested in Second-Hand Freight Cars," DIE WELT, 11 December 1980, p 12. See also the interview with State Secretary in the GDR Transportation Ministry Heinz Schmidt in NEUES DEUTSCHLAND, 18 January 1981, p 2; see also STATISTISCHES JAHRBUCH DER DDR 1979, p 190.

29. See Hoffmann, Otto and Gerhard Scharschmidt, "DDR-Aussenhandel--gestern und heute," East Berlin, 1980, p 71; Robert Menzel (GDR Deputy Transportation Minister): "Further Raising the Party's Fighting Strength," FAHRT FREI, No 1, 1981, pp 6-7. Guenther Knobloch: "Reducing Expenses, Increasing Efficiency," ibid., pp 6-7 and Table 10.

30. For further documentation, see Hannsjoerg Buck, "The Payment Balance Policy of the GDR and the European CEMA Countries (Stabilization Measures Taken by Central Planned Economies to Restore Balance of Payments)," published by All-German Institute, Bonn, 1980, pp 57 ff.

31. See STATISTISCHES JAHRBUCH DER MITGLIEDSSTAATEN DES RGW, published by CEMA Secretariat, Moscow, 1980, pp 275-276.

32. The annual electrification results in the USSR during the first 4 years of the Tenth Five-Year Plan came to 793 km in 1976, 802 km in 1977, 604 km in 1978, and 1,320 km in 1979. See STATISTISCHE JAHRBUCH DER MITGLIEDSSTAATEN DES RGW, published by CEMA Secretariat, Moscow, 1980, p 275-276.

33. In point of fact, the USSR Council of Ministers on proposal of the GOSPLAN (State Planning Commission) decided in 1980 once again to convert 1,300 km of rail line to electric traction and to orient the investment efforts in the transportation sector primarily toward the attainment of this goal. The tremendous efforts required by this undertaking in terms of the Soviet Union's management and investment power can be determined in the light of the fact that the USSR in 1980 decided in only 12 months to convert just as many railroad kilometers to electric traction as the GDR and Hungary, for example, have presently, on the whole, in terms of electrified lines. See Roland Erdmann: "National Economic Effectiveness of Traction Conversion in the Soviet Union," SCHIENENFAHRZEUGE, No 6, 1980, East Berlin, pp 271-273, specifically p 271.

34. See Roland Erdmann: "National Economic Effectiveness of Traction Conversion in Soviet Union," SCHIENENFAHRZEUGE, No 9, 1980, East Berlin, pp 271-273, specifically p 272.

35. About 60 percent of the freight transportation volume annually developing in the Soviet Union are delivered to the desired destinations with the help of the railroads. The Soviet state railroads account for about 40 percent of the passenger traffic volume handled. The most important undertaking concerning the further expansion of the USSR rail network since 1974 has been the construction of the BAM (Baikal-Amur trunk line). The construction of the BAM and other lines behind the Ural Mountains and in the Central Asian republics calls for tremendous expenditures in terms of finance capital, material

resources, manpower, and time. They exceed the expenditures for line expansion in the European part of the Soviet Union by a multiple. The line of the BAM is 4,315 km long. To complete this track layout, it is necessary to lay 3,114 km of new tracks. The line runs throughout seven mountains and among other things across seven of the biggest rivers in Siberia and the Far East. These natural obstacles require about 3,700 engineering structures (mostly bridges) to complete the entire project, along with the construction of countless tunnels with a total length of 32 km and the establishment of 60 supply and railroad stations. At this time, there are 70,000 persons working to complete this transportation project. The construction of the second big east-west artery in the Soviet Union according to preliminary estimates will cost 1 billion rubles. The single-track line of the BAM is designed for a transportation volume of 30-35 million t of freight per year. Electric, gas-turbine, and diesel locomotives with capacities of 8,000-12,000 kp are being used on the line. They can pull trains with a load of 6,000-9,000 t. For train operations on the BAM, it is necessary to produce an extra, super-heavy electric locomotive type which can meet the performance demands on that line and which would offer a guarantee that a well-working train operation can be maintained also under difficult climatic conditions with major temperature differences. The super-heavy electric locomotives are being built in the enterprises of a big combine in Novocherkassk (Ukrainian SSR). According to the development plans of this combine, the plants under its control between 1983 and 1986 are to turn out about 2,000 of these special traction machines. See also A. G. Schuchard: "The BAM in Words and Pictures," FAHRT FREI, East Berlin, No 21, 1980, p 10; and "USSR--Rising Need for Rolling Stock," DDR-AUSSENWIRTSCHAFT, No 34, 20 August 1980, p 13.

36. For example, about 80 percent of the rolling stock exported by Poland are purchased by the Soviet Union.

37. Regarding the balance of trade and the balance of payments policy of the partner countries in the CEMA, see specifically Hannsjoerg Buck: "The Balance of Payments Policy of the GDR and the European CEMA Countries," loc. cit., footnote 30, pp 20 ff.

5058
CSO:2300/325

NEW MEASURES TO BOOST PRIVATE SECTOR REVEALED

Budapest NEPSZABADSAG in Hungarian 30 Aug 81 p 4

[Article: "On the Agenda of the Presidential Council--Unexploited Creative Energies"]

[Text] A series of measures are being continued to help satisfy in a fuller and better way the increasing and constantly more varied demands of the population. In this spirit, the Presidential Council at its Friday session passed law decrees on the further development of the legal conditions for small shop and cooperative management. These statutory provisions form a part of the realization of broad-scale development tasks designed to develop cooperative and retail goods production.

The statutory provisions which are now approved create the possibility, among other things, for the establishment of forms which adjust more rapidly and flexibly to changing requirements and of small cooperatives and industrial and service teams. Orders are approved for the further development of small industry which provides an important part of the services extended to the population. At the same time, the Council of Ministers is authorized to frame rules, varying from present regulations regarding the cooperative form and the economic task force of a "corporation complete with rights as 'legal person.'"

Beginning 1 January 1982

The new statutory provisions which will come into force on 1 January 1982 will reflect the spirit of the resolutions by the 12th Party Congress. As is well known, one resolution specifically established: "An improvement in living standards requires a better satisfaction of the demands for services...and we should stimulate with economic means and promote with more flexible organizational forms an expansion of the scope of services and an improvement in quality." The congressional resolution also stated, and this was taken into account by the drafters of the statutory provisions, that in addition to the efficient use of the work time base, the new organizational forms must also make it possible to make better use of individual and family manpower reserves. To a considerable extent, this contributes to a more flexible satisfaction of the expanding and rapidly changing demands and to an increase in the national wealth.

Thus the present measures are designed to satisfy actual social demands and needs. We expect them to provide an area of operation for creative energies that have not been tapped thus far: primarily in the expansion of services and making them of a a higher level, they should be profitable and contribute to an improvement in the population's living conditions, and to strengthening the socialist bases of the society and economy.

New Forms

Small cooperatives may be formed at the initiative of the members primarily for the improvement of services and the expansion of their sphere. It may have workers both in the main and the auxiliary occupational sphere, who are active both in a membership or employee relationship. In this form the responsibility of the members will be expressed more than heretofore. They are the ones who can decide how large a share of the small cooperative revenue can be devoted to development and how large a share to increasing the earnings of the members and the employees.

Industrial producer and service specialty teams can be established in the framework of cooperatives that are already operating; as indicated by their names, these teams offer primarily services, or they manufacture products which cannot be produced economically in a large factory. They enjoy relative economic-property independence, and relationships with the "parent cooperative" are regulated by agreement.

A current operating form is the agricultural specialty team. The existing orders, however, had made it possible to establish these only in agricultural producer cooperatives and in general consumer and marketing cooperatives. Such a specialty team may be established in the future also on state farms and other state enterprises performing agricultural work.

The economic work task force is a new organization form. These may be established independently or in relation with a state economic organ. The basic goal here, too, is to develop consumer and other services to improve small shop production and supply. If the work task force operates as an enterprise economic work task force, it uses primarily enterprise means. The enterprise has greater influence on the management of this organization and on its entire activity, but its responsibility and risks are also greater.

Modification of the legal regulation of small shops has simplified official procedures and eliminated such earlier limitations as unjustifiable encumbering the satisfaction of actual demands.

The increased exploitation of reserves that are latent in small shop management has made it necessary to continue the development also of serveral other economic forms which are already in operation. Wider opportunities are opened in cooperation with large socialist factories by new orders on the basis of which the economic work task forces or small shops to be established can lease small shop industrial or service units which meet primarily the needs of the population.

Social Interest

The orders which have now been approved set the economic, legal and directive and supervisory limits of the new organization in harmony with social interests. Among other things, the regulation assures a legal area of mobility, an activity which up to now was permitted without license, and was thus essentially uncontrollable. It develops controllable processes which can be regulated and creates the possibility for assuring harmony between the work performed and the revenues deriving from the new forms. All in all, it strengthens the influence of the large socialist factories over those dealing with supplementary activity.

Other statutory provisions regarding the new forms and relating thereto, including decisions expanding the scope of those entitled to social insurance allocation forms, will appear at the end of September.

6691
CSO: 2500/368

WELFARE FUND TO COVER HIGHER MEAT PRICES

Budapest MAGYAR MEZOGAZDASAG in Hungarian No 29, 22 Jul 81 p 20

[Article: "Increase in Consumer Meat Prices--Enterprise Welfare Provisions"]

[Text] The increase in the consumer price of meat and meat products is also making the modification of enterprise welfare provisions necessary. Thus the following should be noted:

1. The operating standard for enterprise child institutions is increasing by 70 forints per person (50 filler per portion) beginning with the first of July, because of the increase in the cost of the raw materials of food.

Thus, from 1 July 1981, the standard is:

for infant care, 28,500 forints per person per year;
for kindergarten, 11,840 forints per person per year.

2. For in-plant meals, the cost increases will be absorbed by the welfare fund. The compensatory fee which workers pay for plant meals cannot be increased because of the increase in the consumer price of meat.

As a matter of information, we are repeating that taking the nutritional standards of the budgetary establishment as a basis, because of the increase in the consumer price of meat, and as a result of the forint value of the meat content of plant meals, the nutritional standards must be increased by, on the average, 4 to 5 percent in order to maintain the food level. In the case of a principal meal, this requires at least a 50 filler per portion raw materials standard increase.

3. The price measure also affects the food costs of enterprise operated resorts. It would be appropriate to establish the new raw material standards for meals in cooperation with SZOT [National Council of Trade Unions] resorts. The resort compensatory fee which workers pay will not increase in 1981.

For orderly accounting purposes, it is necessary that enterprises turn increasing attention towards the harmonization of greater tasks and the sources of available welfare and cultural funds. We must endeavor to have more intelligent management in order to prevent monetary tensions which may arise because further supplementation from the contributory fund may be necessary because of the measures. In addition, we want to call attention to the fact that beyond the raising of the enterprise meals standard which was necessitated by the increased consumer prices of meat, the further raising of the meals standards by increasing the compensatory fee of the workers is not timely. At the same time, the enterprises also ought to provide for the necessary modification of the collective agreement. (Joint communique of the PM-Mum-SZOT [Ministry of Finance-Ministry of Labor] numbered 320/1981, dealing with certain problems touching on enterprise welfare provisions related to the increase in consumer prices of meat)

9093
CSO: 2500/353

NEW RULES FOR AGRICULTURAL SHAREWORK ESTABLISHED

Budapest MAGYAR MEZOGAZDASAG in Hungarian No 29, 22 Jul 81 p 20

[Article by Gyorgy Dudas of the Directive and Legal Affairs Division of MEM [Ministry of Agriculture and Food Industy]: "Conditions of Sharework"]

[Text] MEM decree 38/1977 (XI,5) used to regulate the possibilities and conditions of sharework for large agricultural enterprises. This decree, however, regulated sharework only as far as cultivation of arable land is concerned. Because of the effects of the favorable experiences acquired here, the request to extend the opportunities presented by this type of activity to other areas of agricultural effort was initiated from several quarters.

In the year's 35th issue of MAGYAR KOZLONY, the decree of the agricultural and food industry ministry, MEM number 11/1981 (VI,19) was published, providing for the possibility of extending sharework to the nearly whole spectrum of agriculture and forest management.

Appropriately, the sphere of the large agricultural enterprises in which sharework can be performed is broadening to include fishing production, cooperatives, state farms and tree farms, as well as farming organization included in the forestry management branch.

Beyond broadening the scope for large agricultural enterprises, the range of activities also increased to include nearly the whole branch, in addition to the cultivation of plots. There can be sharework in keeping animals owned and used by the large enterprises, in fishing and in the preparation of animal products (for example, egg production, sheep shearing). The extension of sharework to keeping animals is promoting the utilization of available animal keeping facilities in family farms, and also results in savings on new facilities for the large farms.

According to the decree, in essence any contract or agreement to perform strictly agricultural or forestry management activities can be shareworked. In addition to serving the interests of individuals, this is of great significance to large farms, because it can result in the mobilization of not yet utilized labor force reserves and the easing of the labor force tensions which arise particularly at harvesting.

The continued increases in the cost of energy sources and economy considerations have brought wood, which can be considered a traditional energy source, to the center of attention. According to the decree, there can be sharework even in the various forms of wood production, and the gathering of sawmill scraps can ease the occasional shortages of wood fuel. The felling and cutting of timber under these conditions is not only encouraged, but is profitable on the national economy level.

Since the opportunities for sharework have been made all inclusive, it has become possible for large agricultural plants to make their labor organizations flexible, and also for the shareworkers to better harmonize the work performed on their own farms with their participation in the common effort. In essence, the previous decree, which specified a maximum of 3000 working hours, was superseded because of such considerations. The fact that the decree does not determine the maximum limits of sharework also greatly increases the self reliance of large farms. It now becomes possible for large farms to make unprofitable activities more profitable by using shareworkers.

According to the decree, the following may contract sharework through a work agreement:

a) those who work for large farms (employees), even beyond their working hours and jobs specified in the labor contract;

b) those who are not employed by a large farm.

A member of a production cooperative may accept sharework within the framework of a work agreement even outside of working hours and job areas determined by the labor contract.

On the basis of the practical experiences to date, statutory provisions guarantee the opportunity for contracting sharework through work agreements or labor contracts even with groups of employees of large farms.

The directive affecting private interests--which at the same time are a matter of concern to the large farm--which specifies that restricting regulations which exist for moonlighting, additional occupations and the performance of work under other legal or labor relationships brought about by memberships in a production cooperative, do not extend to shareworkers.

Naturally, the content elements of contracts, or rather agreements, are also paralleling the changes which came into existence with the new decree. For example, the division of working hours collectively performed must be specified in group work contracts or work agreements.

An important element of contracts is the price. The price of the product must be calculated first according to authorized prices, or if these do not exist, they must be specified by the agreement drawn up between the large farm and the one undertaking the work.

The sharework contract may not hire other labor forces to help perform the work, except family members who are not already included in the labor or membership relationship.

If the sharework contractor is planning to include family members into the effort, they must be listed in the contract or agreement along with the number of working hours that can be credited to them.

While the decree has eliminated the previous maximum working hours, there is a significant personal concern in regulating the daily hours of work within some framework. Statutory provision expresses this by obligating the large farms to determine the daily hours expected to be required by taking standards into account. The daily hours of work must be so determined that workers in a membership relationship be ensured 8 hours of rest; those in an employee relationship must be ensured 11 hours of rest daily.

The establishment of the amount of share is a significant problem. In contrast to the previous regulation--as we already mentioned previously--there is no upper limit here either. When the agreement is established--depending on the work involved--the amount and value of the yield and the probably amount of necessary work must be taken into account. After the completion of the work, the large farm and the shareworker are required to hold an accounting and to establish the wages, or rather, to establish the total of the production cost from the value of the share.

9093
CSO: 2500/353

GREATER USE OF ORGANIC FERTILIZER URGED

Budapest FIGYELO in Hungarian 5 Aug 81 p 11

[Article by Dr Attila Santha: "450 Million Loss Each Year"]

[Text] In the last decade, interest centered on the use of animal byproducts, primarily for environmental protection. The large quantity of organic manure generated has caused pollution with which it is more and more difficult to contend. In addition, the extremely rapid rise in the prices of industrial equipment and materials urged the farms to use animal byproducts. Recently it has become generally known that increased replenishment of the organic materials in the soil is necessary for better utilizing the chemicals, as well as decreasing their harmful effects.

Byproducts of Increased Value

About 22 million tons of manure fertilizer are generated in Hungary [yearly], of which only 16 million tons are used on the fields. Only 30 to 40 percent of the approximately 22 million cubic meters of diluted manure is used. Nevertheless, the plant nutrient content of the organic fertilizers generated in raising livestock is equivalent to about 300,000 tons of chemical fertilizers.

In analyzing the decline in the use of organic fertilizers, we must look at the development of the main-product cycle that emerged in the mid-1960's.

The industry-type branch development relying on inexpensive industrial materials and energy at best recognized only the vertical relationships between main products--and even that was the source of many tensions let's recall only the relationship between fodder production and livestock raising. The branch connections based on byproducts were practically eliminated.

Because of inexpensive industrial equipment, the independent and isolated development of the branches also agreed with the interests of the farms; increasing the production of the main product resulted in much larger economic profit than by using the byproducts. Therefore, not only was organic fertilizer [not] used in growing plants, but also livestock raising was unwilling to incorporate the valuable byproducts from plant growing and from the food industry into the structure and increased technology of livestock feeding.

The erroneous agronomic assumption that with the intensive application of chemical fertilizers there is no need to replenish the organic materials, also played a role in neglecting to use organic fertilizers. Since the organic fertilizers are materials with lesser concentration, using them is more costly than using chemical fertilizers. Of course, the relatively inexpensively produced chemical fertilizers were sold with significant state subsidies.

[Graph: "The STAGEK MEM (Statistical and Economic Analysis Center, Ministry of Agriculture and Food Industry) Data"

Agricultural and Food Industrial Foreign Trade in 1975 through 1980

Key to the graph: 1. Export 4. Food industrial products

2. Import 5. Billion forints

3. Agricultural products 6. Years 1975 through 1980]

Because machinery development was focused on the main products, the modern machinery lines needed for using organic fertilizers were not developed. Thus, this operation could not fit into the industry-type plant-growing technologies.

The increase in material and energy prices increased the value of byproducts in [livestock] feeding, as plant nutrients and as energy sources.

Recently a number of solutions were worked out for the use of byproducts. Undoubtedly those solutions for using byproducts that, when applied, will produce an economic advantage for the enterprise, may become popular. In order to make such decisions, one must know not only the costs of utilization but also the value of the byproducts.

The Costs of Substitution and Utilization

Accounting keeps a record of the byproducts of livestock raising at an accounting price that is standard for the whole country. The accounting price is not suitable as the foundation for economic oeprating decisions related to the use of byproducts. A more realistic economic evaluation of the byproducts could be determined if those prices were determined on the basis of the products that they replace. Thus, the value of organic fertilizers could also be determined primarily on the basis of the value of the active ingredients in chemical fertilizers of equivalent value with their plant nutrient contents. (The value of organic fertilizer is higher than this, but the value represented by the organic material is difficult to express in terms of numbers.)

If we consider that the cost of active chemical fertilizer ingredients equivalent to 1 kilogram of active organic fertilizer ingredients is 5 forints including the cost of application, then at the branch level, where there is a 100 ft per ton accounting cost also charged against the cost of using organic fertilizers, the replacement of each kilogram of chemical fertilizer with equivalent organic fertilizer causes a significant cost increase of more than 12 forints. This can by only decreaded [but not eliminated] by the favorable effect of the organic fertilizer, which was not considered in devising the accounting cost.

At the enterprise level, where the 100 ft accounting cost is not charged as an expense, because cost and result equalize themselves among the branches, replacing chemical fertilizers with organic fertilizers is cheaper by about 3 ft per kilogram of active ingredients.

The farming operations are using chemical fertilizers almost exclusively to satisfy the nutrient requirements of crop growing, while a significant portion of their organic fertilizer inventory goes to waste.

For each kilogram of organic fertilizer active ingredients not used but replaced with chemical fertilizers, the farm not only takes on the cost of purchasing the chemical fertilizer. It also gives up the economic advantage from the value of organic fertilizer, calculated on the basis of the effective ingredients in chemical fertilizers, significantly exceeding the cost of application.

Since each year 6 million tons of organic fertilizers go unused, each year the agricultural operations lose about 450 million forints.

The managers of the [agricultural] operations are waiting for solutions for using the byproducts, [solutions] that can be implemented without any significant investments. But this is an unfounded expectation because the use of byproducts requires significant investments in industrial-type agricultural operation. Under the given circumstances studies must be directed primarily at determining the most favorable solutions.

The large volume and relatively low value of byproducts will undoubtedly result in the application of solutions depending on the operation's given circumstances, rather than in the universal application of some kind of standardized technology.

8584
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CURRENT ECONOMIC SITUATION REPORTED

Economic Communique, 4 Aug 81

Krakow GAZETA KRAKOWSKA in Polish 4 Aug 81 pp 1, 3

[Text] Agriculture

Ten percent of the harvesting equipment is out of service due to a shortage of spare parts. The SKR [Agricultural Circles' Cooperative] and PGR [State Farms] in Ciechanow Voivodship resorted to making cloth for their sheaf-binders by hand.

Industry

In a number of plants, production was limited or halted due to a shortage of raw materials and erratic cooperation of other plants.

In the FSC [Truck Plant] in Starachowice, the engine assembly line was closed until 3 August, while the assembly of trucks has been halted until 6 August due to a shortage of gear-boxes manufactured in the FPS [expansion unknown] plant in Tczew, fuel injectors from the WKS [expansion unknown] plant in Mielec, body parts from the FSS [expansion unknown] plant in Kielce, gas tanks from the JZS [Jelcz Automotive Plants] in Jelcz, brakes from the FOS [expansion unknown] plant in Lodz, etc. At present, the Starachowice plant manufactures only spare parts.

Due to a shortage of borax imported from hard-currency countries, production of enamelware in Rybnik, Olkusz, and Myszków may have to be halted.

Due to a shortage of raw materials, production of powder laundry detergents was cut by 50 tons, soap, by 40 tons, and toothpaste, by 30 tons.

Farm machinery production has been suspended because of a shortage of Polish-made products, primer paint and V-belts and a shortage of funds for the import, among other items, of Galla chains for sheaf-binders and harvester combines, rubber parts manufactured in FRG and pipes manufactured in France.

A total of 3,800 tons of coke were not produced due to a shortage of coking coal (in Zdzieszowice and the Kósiuszko works) and work crews (in the Lenin Steel works). Production quotas for steel were not met. However, surplus production of non-ferrous metals was reported.

Transportation

In the Transbud association, 3,129 transport units were out of service, including 1,904 units due to a shortage of fuel. Severe disruption in city transit systems and the busing of workers were caused by a shortage of tires, batteries and spare parts.

Construction

There is a shortage of electricity and coal for the production of cement and powdered aluminum for concrete. On 29 July the resulting losses reached approximately 6 million zlotys on the basis of sales prices.

Postal Service

On 28 July, approximately 9,500 packages from abroad were expedited; a total of 89,500 packages are still in storage.

Market

Meat supply to the market has not changed. Ration coupons are still not fully covered by supplies.

There is a shortage of bread flour in Skierniewice, Bielsko-Biala, Leszno, Jelenia Góra, Suwalki, Sieradz and Ostroleka Voivodships.

Economic Communique, 6 Aug 81

Krakow GAZETA KRAKOWSKA in Polish 6 Aug 81 pp 1, 3

[Text] Agriculture

Nationwide, with the exception of the northeastern voivodships, the weather was favorable for harvesting. In several regions (Chelmsk), farmers are being assisted by factory workers and youth groups. The POM [State Agricultural Machine Centers] are working as usual.

On 1 August, in Gorzów Wielkopolski Voivodship near Międzychód, the grain was beaten down by a hail storm.

In July, 110,200 tons of meat, or 97.9 percent of the monthly quota, were purchased from meat producers. During the same period a year ago, 161,700 tons were procured.

Industry

A continuing shortage of raw and other materials is resulting in a drop in the rate of production. Temporary shutdowns continue in the ZTS [expansion unknown] plant Gamrat in Krosno, the ERG [expansion unknown] plant in Jaslo, the State Oil Refinery in Jaslo, the Glass Works in Krosno, and the Rubber Industry Plants in Sanok.

In Wroclaw Voivodship there is a shortage of ethyl gasoline 94 and 78. The CPN [Petroleum Products Center] has no ethyl gasoline in stock to supply Wroclaw Voivodship.

Due to a fire in the power drive unit of the conveyor-belt system in the coal mine in Belchatów, an excavator was out of service for approximately 10 days.

On 2 August, a crump occurred in the Coal Mine Zabrze that did not pose any threat to the life of the miners.

The iron and steel industry production quotas were not met. On 1 August, the daily quotas for non-ferrous metals were fulfilled.

Transportation

The PKS [State Motor Transport]continues to have shortages of spare parts, tires, and--in many parts of the country--fuel. This situation makes it difficult to maintain normal bus service. The PKS office has prepared alternative bus schedules.

A shortage of spare parts and fuel continues to hamper the operation of city transit in Bielsko-Biala, Gdańsk, Koszalin, Piotrków Trybunalski, Tarnów, and Walbrzych Voivodships.

Food Economy

A PGR cattle farm in Grudzowice in Przemysl Voivodship reported incidents of cattle poisoning. A total of 97 animals had to be slaughtered. The meat was examined by the veterinary service and was determined to be fit for human consumption.

Also in Przemysl Voivodship a hog disease, the so-called Cieszyn disease, has been discovered at four locations. The veterinary service continues to take intensive preventive measures.

Economic Communique, 7-9 Aug 81

Krakow GAZETA KRAKOWSKA in Polish 7-9 Aug 81 pp 1, 6

[Text] Industry

A poor supply of foodstuffs and manufactured goods and no improvement in the supply of raw and other materials for manufacturing plants still negatively affect production results. Production irregularities continue, absenteeism is increasing, and utilization of work time and production potential is worsening. In some plants, absenteeism has reached 20 to 30 percent, and the utilization of production potential is only 50 to 60 percent.

The machine-building industry is facing increasing difficulties due to a shortage of imported raw materials. The shortage is most acute in the engine-building industry, foundries, plants manufacturing hardware and enamelware, ship-building, automobile industry, and rolling stock production.

Production of many chemical goods continues to be insufficient, mainly due to a shortage of imported raw materials. In the Cosmetics Plant in Poznań, for example, production of creams, toothpastes, and soaps was temporarily suspended.

A difficult situation persists in the rubber industry, especially in the Stomil Plants in Dębica regarding the production of tires and tubes for cars and bicycles. However, production of paint used in containers for the food industry has been resumed after a fairly long period in the Polifarb Plants in Wroclaw.

The knitwear and cotton industries continue to limit their production due to a shortage of imported spare parts for machinery and equipment, raw materials, dyes, and chemicals.

Agriculture

On 4 August, the southern part of Kielce Voivodship suffered from a severe hail storm. The most extensive damage estimated to be between 250 and 300 million zloty occurred in the gmina [rural parish] of Wiślica. Hail storms moved also across Katowice Voivodship. In some villages, all crops were destroyed. In Kalisz Voivodship, the harvest was temporarily halted due to intensive rains.

A shortage of string for sheaf-binders continues. In Slupsk Voivodship this shortage is particulary acute.

In Zielona Góra Voivodship, large areas of grain have been beaten down and overgrown with weeds; this results in breakdowns of machinery.

Market

The supply of rational goods is irregular. There are still shortages of meat. In Koszalin Voivodship, village stores were noted to have increased supplies of canned fish, variety meats, salt, and cigarettes.

There is an adequate supply of potatoes and vegetables on the market.

In Bielsko-Biala and Wroclaw Voivodships, bread was periodically unavailable in retail outlets.

In Katowice Voivodship, the supply of milk covered 87 percent of demand. There was a shortage of cream, cheese, cottage cheese, powder, laundry detergent, personal hygiene products and matches.

Transportation

The railroad system is operating without problems. The number of freight cars available surpassed the demand. Thus it was possible to fulfill all the needs of the coal mining industry and Baltic ports.

On the other hand, difficulties in the PKS [Polish Motor Transport] transit system are mounting. It is increasingly difficult to maintain regular bus schedules due to a shortage of spare parts, tires, and fuels.

9852
CSO: 2600/308

POLAND

POLAND'S ECONOMIC WOES ANALYZED

Hard Currency Debts

Budapest HETI VILAGGAZDASAG in Hungarian 8 Aug 81 pp 11-12

[Article by Andrzei Lubowski: "Polish Debts; Where Have All Those Billions Disappeared To?"]

[Text] For the remainder of the year Poland is going to need at least another $2 billion in new loans just to pay for its foreign purchases of the raw materials, parts and equipment that are essential to keep its production going--announced Zygmunt Kroliak, head of the foreign exchange and financial department of the Polish Ministry of Foreign Trade. In his article written for HVG [HETI VILGGAZDASAG], Andrzei Lubowshi, a specialist of the economic weekly ZYCIE GOSPODARCZE, takes an in-depth look at the circumstances which have led to the acculumation of Poland's mountain of debts.

Hardly a year ago it was still only through the Western mass media that Poles were able to learn about the extent of their country's indebtedness. It was not until the strikes in August of last year, when the Minister of Finance appeared on TV, that the first official reports were released concerning debts to the West, which at that time were estimated to be at more than $20 billion. At that time the announcement came as a shock to many Poles. Since then, however, this amount has steadily increased, and today it has already reached $25 billion. Reports after reports are being published in the Polish papers about the ongoing financial negotiations with Western creditors on the subject of rescheduling earlier debts and obtaining new loans.

The country needs to have its payments postponed, for otherwise, officially too, it would have to declare bankruptcy. The following figures convincingly confirm this: This year Poland is supposed to repay $10 billion, yet its total dollar revenues from its constantly declining Western exports are not even expected to add up to $7 billion, in other words, they will not even cover this year's import bills.

At the end of April, the Polish government and the governments of 15 of the largest capitalist creditor countries came to an agreement. Poland will be allowed to receive bank loans for a period of eight years, which it can use to repay 90 precent of its debts falling due this year, (in addition to the installments due, its debts now will also include the interest). Altogether, these loans will amount to $2.5 billion, to be repaid between 1986-1989. While this is a considerable extension, it is still only the first step, for the agreement pertains only to government guaranteed loans. Outstanding Polish debts to Western commercial banks--to which government guarantees do not apply--are even greater than these. For several weeks now, there have been continuous negotiations with representatives of 450 banks about the possibility of deferring payments (the last meeting was held in Zurich), but the final outcome of those talks can by no means be taken for granted.

Even if they end successfully, relief will be short: with the coming of fall a new round of talks will get under way immediately, to discuss the rescheduling of those debts which are projected to fall due in 1982 and in subsequent years. We can expect, that by then our foreign partners will no longer be satisfied with learning about the program we intend to use to revitalize the Polish economy; they will also want to see the first signs of recovery.

The weight of foreign debts is becoming an increasing burden on the Polish economy. A considerable segment of industry has become virtually paralyzed, and there is a shortage of raw materials, parts and other important products. This is the heavy price which we must pay now for the economic policy blunders of the 70's, for our incompetence, giant mania and occasional adventurism.

Shortly after taking office, Gierek announced his so called active credit policy. It was called active to distinguish it from the extremely cautious borrowing policies of an earlier Polish leader, Wladislaw Gomulka. When in December 1970, he left the scene, Poland had virtually no foreign debts, which meant considerable help for Gierek. Gierek's and Jarosewicz's new economic policy was based on the notion that foreign technology purchased on Western credits would give the Polish economy a powerful shot in the arm, and that it would, within a short period of time, boost the production of modern easy-to-export products. This, in turn, would make it possible for the country to repay what it had borrowed. The large-scale buying fever which ensued, however, led to the purchasing of not only truly needed, but also several unnecessary import items.

Blinded by the glory of quick successes--economic growth and the rate of investments indeed picked up--the decision-makers forgot about the costs and about the nation's ability to repay its debts. Under the spell of modernization, that is to say, make-believe modernization, the essential question: "how much is all of this going to cost us?", was often swept under the rug.

Between 1971-1980, Poland purchased $57.9 billion worth of goods from the West, but could only sell $42.1 billion worth of products in turn. Consequently, the total foreign trade deficit for the 1970's reached $15.8 billion. This is how much Poland's present foreign debts would amount to if we discounted the fact that banks are not charitable institutions, and that they do charge interest on their loans. Total interest charges on the loans obtained during the past decade amount to $7.8 billion.

Now, that the country is up to its neck in debts, when you have to stand in line even for cigarettes because there is no foreign exchange left to pay for the cigarette paper, we hear the same question everywhere: What was the $25 billion foreign loan spent on? Where has the money disappeared to, which instead of giving it new momentum, has knocked out the Polish economy?

It would be an exaggeration, of course, to say that Poland has completely wasted this $25 billion. Western credits have undoubtedly helped to modernize Poland's production capacity. The price of this modernization, however, has proved to be excessively great. Upon closer examination, it turns out that only 25 percent of the Western loans have been expended on buying machines and other equipment, and that 15 percent was spent on grain and fodder imports. The rest, some 60 percent, was eaten up by purchases of foreign raw materials, semi-finished industrial products, parts and other accessories. And it is this last import demand which has placed the greatest burden on the national economy, and which is the most difficult to eliminate. This 60 percent is the embodiment of probably the most serious mistake which has resulted from the investment policies of the 1970's: the creation of a production structure which has become dependent on large-scale Western imports, and the establishment of factories and even whole branches of industry which are unable to operate without a continuous inflow of import products from the West. Suspension of imports has often been the equivalent of stopping production.

In the words of Lorenz von Stein, an economist who lived in the last century, "if a country is without debts, it means either that it is doing too little for its coming generations, or that it is expecting too much of its contemporaries." The economic blunders of the past decade in Poland, including the country's credit policy, have demanded an enormous price from contemporary Poles and at the same time, I am afraid, also from the future generations.

First Half 1981 Foreign Trade Performance

Budapest HETI VILAGGAZDASAG in Hungarian 8 Aug 81 p 11 inset

[Article by Gyorgy Tausz: "An Account"]

[Text] How did Poland's foreign trade develop during the first half of 1981? In its report recently made public in Warsaw, the Polish Bureau of Statistics has determined: exports and imports fell 17.3 and 7.4 percent, respectively, below last year's levels. The decline was especially great in dollar-cleared trade, compared to the same period last year: exports dropped by 21.5 percent to $2.5 billion, imports by 21 percent to $3 billion. In rubel-cleared trade, during the first half, exports amounted to 2.9 billion rubels, 14 percent less than a year ago; imports, however, increased by 5.4 percent, to 3.4 billion rubels.

Industrial production during the first half of 1981 was also lower by 12.5 percent than during the same period last year. Losses were especially considerable in the energy industry and in the production of raw and basic materials, which created supply problems in the processing industry and in other branches of the economy, and made cooperation among them difficult. As the TRYBUNA LUDU pointed out, the sore point of the national economy continues to be the decline of coal- and electric energy production. The amount of coal brought to surface so far, has been 21.8 percent below last year's level

The Poles' investment troubles did not lessen during the first half of the year. The main problem continues to be the enormous unfinished investment stock which was inherited from the previous economic management. Although this year the value of investments placed into operation has been 2.8 percent higher then during the first half of last year, amounting to 64.9 billion zlotys, some 50 billion zlotys worth of projects could not be completed. The situation is especially difficult in housing construction: so far, the construction industry has only met 31.4 percent of its housing construction plan for this year, and has delivered only 82 thousand residential units to the population, 35 thousand units less than during the first half of 1980. The situation is further worsened by the fact that in seven voivodships they have not begun construction of a single residential building, and that work on health, education and cultural projects has also been slow.

What is remarkable, however, is that despite the decrease in production, the number of employed has grown by 45 thousand, that is, by 0.4 percent, and wages have increased by 26 percent. During the first six months of the year, the population's cash income exceeded 961 billion zlotys, reaching a level which is 172 billion zlotys, that is, 21.8 percent higher than the comparable figure for the same period last year. The key role in this growth can be attributed primarily to increases in wages and social benefits, and also the the raising of state purchase prices. The rapid growth of incomes had a serious impact on the domestic market situation, which was further aggrevated by similarly unfavorable developments in the state purchases of agricultural products. Retail sales were only able to increase by 0.5 percent. Compared to last year's levels, for example, 22.9 percent less meat, 15.5 percent less milk, and 3.7 percent fewer eggs were purchased by the state during the first half of this year. Due to the reduction of state purchases, efforts to meet demands were completely unsuccessful. It has become increasingly difficult to honor ration-coupons.

In the stores, a growing number of products are being added to the list of shortage goods: cigarettes, matches, vodka, detergents, shampoo and toothpaste. To make matters worse--as it was reported in ZYCIE GOSPODARCZE--since June there has been an increase in demand for durable consumer goods, and as a result, there are many places already where stores have even run out of clothes. It is beginning to look more and more as if people were buying things just to get rid of their money.

Plans For Reform

Budapest HETI VILAGGAZDASAG in Hungarian 1 Aug 81 pp 6-8

[Article by Aleksander Paszynski: "Polish Reform Plans; The Beginning of the Road?"]

[Text] Has the 9th Congress of the PZPR helped to bring the Polish economic crisis closer to an end? As Aleksander Paszynski, economic editor and also assistant chief editor of the weekly, POLITYKA, explains in his most recent article for HVG: congressional resolutions indicate--as do the continuing debates about economic subjects--that the search for a way out has begun, even though the economic situation is temporarily deteriorating.

The special congress of the PZPR pledged its firm support for the earliest possible introduction of the economic reform. The majority of the delegates who spoke during the plenary debate--especially those serving on the congressional problem-solving committee in charge of the reform and economic policy-related matters--expressed their criticism in pointing out that the reforms were taking too long to prepare, and that there seemed to be some hesitation on the part of the state administration to implement those reforms.

"We are fully determined to work expeditiously and consistently toward implementing the principles of the reform"--said the prime minister. "The time-table of the reform has been prepared. We have begun a sweeping reorganization of our central economic management. Drafts for legislative measures vital for our economic management and state administration have been completed. Since 1 July, our state farms and small-scale industries have been operating according to the new system already."

Of the government proposals put before the delegates at the 9th Congress, the following time-table has emerged: within the next two or three months, all statutory provisions and all of the various resolutions, decrees and directives which have regulated our national economy so far, will have undergone a general review. Those statutory provisions which are in conflict with the main goals of the reform, and which--in the prime minister's words--tie up "initiatives and serve as a cover for overcautiousness and passivity" will be rescinded.

The last quarter of the year will be an extremely important period in the implementation of the reform: that is when the new principles and economic measures will be put in their final form. Expeditious preparatory steps are needed, so that starting the new year, the fundamental branches of the national economy can already begin operating according to the new principles. The government is naturally aware of the fact, that the serious imbalances and disproportions which exist in virtually all spheres of the national economy, will make it more difficult to implement the reform. The fact, however, that during this temporary period things such as certain raw- and subsidiary materials and foreign exchange will have to be distributed centrally, should not be used as an excuse for putting off the reform. To ensure that this does not happen, the government has set up a commission for reform affairs--naming professor Baka as government commissioner--whose job, among other things, is to prevent the presently required restrictions and any methods which are incompatible with the concept of the reform from causing delays in the sweeping implementation of the reform.

The positively pro-reform tone of the congressional addresses and resolutions was, I feel, perhaps even more important than the detailed observations made in them. I have written on several occasions, that the failures of Polish economic reforms are to be attributed to the fact, that in the past economic policy was never in firm support of reforms. Now the situation has changed. In his speech, prime minister Jaruzelski outlined some preliminary measures which will virtually insure that this time the reform does not remain merely a dead letter.

In addition to pledging its support to the reform, the congress also accepted the government's program which is aimed at bringing the crisis to an end and stablilizing the national economy.

The document put before the congress calls attention to the fact, that the rate at which the government program can be implemented will equally depend on the successful work of our economic management organs, on the initiatives of our enterprises and on the commitment of our society. The implementation of the program will also be affected by the conditions attached to our foreign payments falling due, by the world market situation and by objective conditions which are hard to determine in advance; consequently, any forecasts as to the precise date by which the crisis will be eliminated, can, by definition, only be prognostic in nature.

This is important, because according to all estimates and predictions received for 1981 so far--as the government document points out--we have to expect a further worsening of the situation. Based on various situation analyses, and assuming that external conditions will be at least moderately favorable and that the goals of the program will be successfully achieved, the following are considered to be the most probable target dates for regaining our pre-crisis levels:

-- in plant growing, within 2-3 years;
-- in livestock breeding, within 3 years at the earliest;
-- in industrial production, within 3-4 years;
-- in the national income, within 5-6 years;
-- the reduction of our foreign debts can begin within 6-7 years.

Although the market situation will noticeably improve, in all likelihood there will not be any significant improvements in the supply of meat and meat products until 1984, at the earliest. Even so, however, the 65 kg level of per capita meat consumption will not be possible to reach again until 1985.

The level of our national economy, however, which is expected to become restored within a few years, will have to be characterized by a different--compared to its pre-crisis status, more favorable--structure in three areas:

-- The structure of industrial production must better adjust itself to the national economy and especially to market and export demands. (According to the program, total industrial output in 1985 will be 5 percent higher than in 1980.)

-- The energy and material intensity of production must be significantly decreased, and all waste in the utilization of basic raw materials such as coal, and subsidiary materials such as cement, must be eliminated.

-- Income differences must be reduced, and the principle of waging according to the quantity and quality of work must be strengthened. In addition, we must adhere much more closely to the fundamental principles of socialism in the sphere of distribution.

As we can see, bringing the crisis to an end will take time; at least 3 to 4 years in the most important areas. Yet in the meantime, the population's power of resistance to the crisis is rapidly weakening. Following the Kutno "hunger march," Solidarity and the branch unions joined forces in demanding that the Ministry of Internal Trade rescind the 20 percent reduction in meat rations announced for August. The government, in agreement with the union, finally decided to reinstate the 3.7 kg ration, starting in September. To make this possible, however, an additional 20 thousand kg of meat is needed for September already, which can only be supplied from abroad. In order to tap surplus purchasing power, the government has introduced a price increase plan, which calls for a 200 to 400 percent increase in the price of various foodstuffs. The national arbitration board of the Solidarity union--claiming to speak for all of its 10 million members--has announced that it would accept the plan only if the proposed price hikes are introduced as part of the general economic management reform, and if those living on low wages and pensions are given a compensatory increment to their income. It is a favorable sign, that Solidarity has expressed its willingness to agree to a freeze on wages until the end of the year.

To quote from the government program presented at the 9th Congress of the PZPR: "Failure to unite all of our social forces, would mean delays in the implementation of the program."

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WEST GERMAN ANALYSIS OF POLISH INDEBTEDNESS TO WEST

West Berlin DIW-VIERTELJAHRESHEFT in German Vol 50 No 1, Jan-Mar 81 pp 53-64

[Article by Heinrich Machowski: "The Indebtedness of the People's Republic of Poland to the West--Current Status and Outlook"]

[Text] The Current Economic Situation in Poland

Poland's economic difficulties, which as early as 1979 had assumed threatening dimensions, grew increasingly critical last year (see Appendix, Table A1). The country's gross national product, which according to the plan was to increase by 1.5 to 2 percent, declined in 1980 by 4 percent; after 1979 (-2 percent), this was the second decline in the entire postwar period. In industry (-3 percent), in the construction sector (-10 percent), and especially in the agricultural sector (-15 percent), the results fell short of the level attained in the preceding year. Output of numerous industrial products decreased--in some instances considerably: Hard coal production decreased by 8 million to 193 million tons--a direct result of the new working time agreement concluded between the "Solidarnosc" Mining Union and the Polish Government; among other things, this agreement stipulated abolition of the excessive Sunday and holiday shifts. Consequently, hard coal exports had to be reduced by over 10 million tons to 31 million tons (income loss: U.S.$350 million).

In the agricultural sector, it was the potato and forage crop harvests in particular that were unusually bad. While the country's grain harvest (16.5 million tons) exceeded by more than 1 million tons the level attained in the preceding year, it fell short by 3 million tons of the average harvest total during the period from 1971 to 1975. The result: Contrary to the plan, last year Poland had to import from the Western countries (above all from the United States) U.S.$1.8 billion worth of grain and feedstuffs (9 million tons--a 26-percent increase); the Polish foreign-trade deficit in agricultural products and foodstuffs has increased further. Since meat production declined as well (-2.5 percent), the population's meat supply situation has been deteriorating further. Imports of 50,000 tons of meat from Western Europe in the last quarter of 1980 (value: U.S.$60 million) did not noticeably improve the supply situation.

The average wages and salaries nominally increased by 13 percent (to 5,755 zlotys per month); for the most part, this increase ensued from the pertinent agreements between the trade unions and the government. Pensions rose by an average of just under 10 percent. According to official data, the cost-of-living expenses for

Poland's private consumers increased by 10 percent; thus the purchasing power of wages and salaries increased by a mere 3 percent, while that of pensions actually declined. The prices of basic foods showed an above-average increase, i.e. 14 percent (potatoes: +44 percent; vegetables: +33 percent; meat and meat products: +20 percent; fruit: +19 percent). The plan fulfillment report points out in particular that low-income workers, large families and pensioners had to accept a decline in their standard of living. All in all, the domestic disequilibrium has become intensified and social dissatisfaction has increased.

The shortcomings and interruptions of export production and the high import requirements in regard to grain, livestock feed, meat and other producer and consumer goods resulted in a situation where--contrary to the plan targets--exports declined (in real terms) by over 4 percent; the import volume dropped by no more than 3 percent. The terms of trade deteriorated by 1 percent; in the trade with the socialist countries, this negative price effect was felt more strongly (-2 percent), as compared with the commodity trade with the rest of the world (-0.5 percent). In 1980, Poland's indebtedness to the West increased by over 10 percent to U.S.$23 billion. But from the USSR, too, Poland imported U.S.$900 million worth of goods on a credit basis.

The economic development in Poland during the period from 1970 to 1980 can be summarized as follows: As a politically and psychologically understandable and economically sensible reaction to the worker unrest in December 1970 and in the spring of 1971, the then new Party leadership under Gierek had proclaimed an economic program characterized by the following priorities:

--Rapid improvement of the people's standard of living;

--full employment;

--industrialization and modernization of the entire national economy so as to catch up with the development in the leading Western industrialized countries.

In order to attain these economic policy objectives, it had been planned to draw to a greater extent on foreign credit ("active credit policy").

This policy, which initially produced tangible results, is now considered a failure. The marked acceleration of investment activity during the first half of the last decade, which was financed not through reduction of consumption, but largely through Western loans, did not yield the results hoped for. On the contrary: The Polish economy's structural imbalance--foreshadowed by the one-sided development of heavy industry during the first phase of industrialization after 1945--has been further aggravated by the intensified expansion of industry. It is above all the bottlenecks in the energy and raw material sectors, in agriculture and in the transportation sector that have increasingly impeded the production process. In consequence of this, the rate of economic growth has been declining. For this reason and on account of the Western recession, the expansion of exports to the West has since 1974 been slowing down. The deficit in the Western trade balance could not be reduced fast enough. This and the growing interest rates caused a further rise in Poland's foreign debt. To slow this increase, it was necessary to curtail Western imports. This in turn resulted in increased supply shortages in Poland's industrial sector and the share of idle industrial capacities is increasing.[1] At present, the shortage of energy and raw materials is the most serious obstacle to economic growth in Poland.

By means of a 3-year stabilization plan, Poland wants to revive the economy by 1983. This program, which upon its completion is to form the cornerstone of the 1981/85 Five-Year Plan, is presently (end of February 1981) still on the drawing board. So far, not even the economic policy goals for 1981 have been definitively articulated; the reason: great uncertainty at the domestic and at the foreign-economic "front."

Thus, even though the planners expect an economic growth rate of between 1 and 1.5 percent, they do not rule out the possibility of another setback, primarily because the development of the country's industrial production cannot be predicted with certainty. It would be quite a success, if hard coal production could be stabilized at the 188 million-ton level--this quantity would be necessary to meet the minimum domestic demand (167 million tons) and the existing long-term export contracts (21 million tons). However, this production goal can be attained only if the miners produce 16 million tons in voluntary weekend shifts--and precisely this is doubtful.

Furthermore, success will largely depend on whether or not the state's economic policy instruments will be sufficient to increase agricultural output--and in Poland, this means above all: the production of the private farmers--to the extent desired. It is planned preferentially to supply the agricultural sector with producer goods and capital, to help the private farmers in marketing their products, to introduce autonomy in the agrarian sector and--last but not least--to give legal protection to the private farms.

As regards the national economy as a whole, the state has announced an extensive economic reform. It is uncertain, however, whether this will generate the impulses effecting the--urgently needed--increase in labor productivity. This reform package comprises the following measures: democratization and decentralization of planning; full autonomy for the enterprises; profit-orientation as an enterprise leitmotif; reorganization of overall economic cost accounting and pricing, including the prices of foodstuffs, etc.--this catalogue not only indicates the direction of the reform course, but also illustrates the difficulties involved in this operation.

As far as the foreign-economic flank is concerned, an arrangement was made with the Soviet Union, which gives Poland a little more breathing space: The Soviet loans effected by the end of 1980--according to Western estimates, these loans total U.S.$3.5 billion--need not be paid back before 1985; moreover, in addition to a Soviet $1 billion loan it received for 1981, Poland can this year purchase $2 billion worth of Soviet goods on credit. The GDR, too, is prepared to lend assistance to Poland (commodity credit: $95 million; financial credit: $80 million).

As regards the current financial situation vis-a-vis the West, the picture is not clear. In order to insure the necessary supplies and to prevent plant shutdowns, Poland must import from the West at least $9 billion worth of goods. At the same time, old loans in the amount of $7.5 billion must be paid back. In addition, there is the interest--amount unknown--to be paid on the current loans. With its own export revenues valued at $8-9 billion, Poland must this year take out new loans in the amount of over $10 billion. In the next 2 to 3 years, Poland's situation is not likely to improve; so what Poland needs from the West is a medium-term stopgap loan.

Kania and Jaruzelski need not only confidence and discipline at the domestic front, but also understanding and support from the Eastern and Western countries. If such support does not materialize, it will probably be impossible to solve Poland's present economic difficulties. The unfortunate aspect of this situation is that for a few years fewer consumer goods will be available to the population.

The Development of Poland's Western Trade in the 1970's

In the Polish foreign-trade statistics, a distinction is made between the socialist trade partners (at the last count, this group comprised 13 states[2]) and the nonsocialist (or capitalist) trade partners. The second group is divided into economically developed countries (called Western industrialized countries in the following[3]) and developing countries.

For the purpose of foreign-trade planning, the foreign partner states are assigned either to Currency Area I (countries, with which Poland maintains a clearing system for inconvertible currencies) or to Currency Area II (countries, with which Poland transacts the monetary transfers in convertible currencies). The present study focuses on Currency Area II.

The list of countries belonging to Currency Area II is not published. It is known, however, that at present Poland transacts all transfers involving Western industrialized countries in convertible currencies. Table A2 indicates that this applies also to most of the developing countries and to some of the socialist trade partners (People's Republic of China, Yugoslavia). Comparing the data this table presents on the Polish trade balance deficit--this deficit is the principal cause of Poland's indebtedness to the West--one notes that one can fall back on the data concerning trade with Western industrialized states whenever there is a lack of information on trade in convertible currencies.

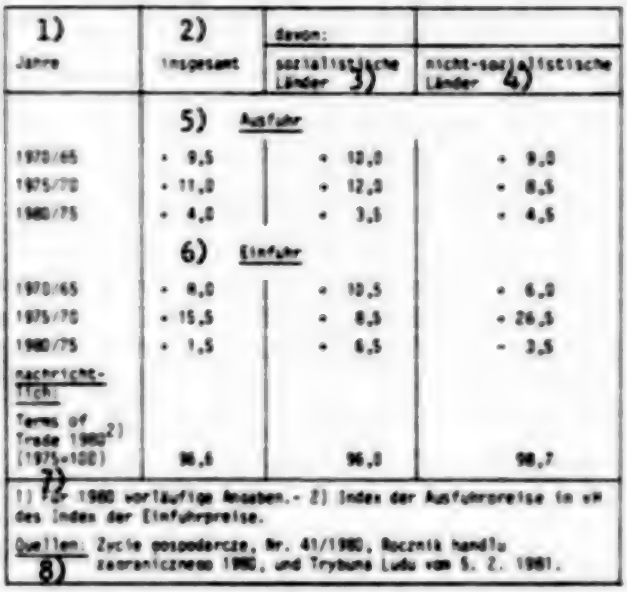
As is shown by the following percentages (total imports and/or total exports = 100), in the first half of the 1970's Poland's foreign trade with countries belonging to Currency Area II (A) and with nonsocialist countries (B), including Western industrialized countries (C) developed more rapidly than did the country's foreign trade as a whole:

Year	Exports			Imports		
	A	B	C	A	B	C
1971	37.5	37	30	33.5	33	27
1975	42.5	40	31.5	59	54	49
1979	40.5	39	31	50	45.5	38

Western imports in particular increased sharply during the period from 1971 to 1975--a development that was reversed in the second half of the last decade in the course of the accommodation policy initiated at that time. At the last count, however, 50 percent--a marked increase over 1971--of all imports still came from Currency Area II; among the CEMA states, Poland thus appears to be the country with the highest degree of engagement in trade with the West.

The following table on foreign trade as a whole and trade with the nonsocialist countries shows the crucial role Western imports played in the development of Poland's total imports during the period from 1970 to 1980 (price increases have been taken into account):

Development of Poland's Foreign Trade Broken Down by Region, 1965-1980[1] (real average annual changes (%))



1) Jahre	2) Insgesamt	davon: sozialistische Länder 3)	nicht-sozialistische Länder 4)
	5) Ausfuhr		
1970/65	+ 9,5	+ 10,0	+ 9,0
1975/70	+ 11,0	+ 12,0	+ 8,5
1980/75	+ 4,0	+ 3,5	+ 4,5
	6) Einfuhr		
1970/65	+ 8,0	+ 10,5	+ 6,0
1975/70	+ 15,5	+ 8,5	+ 26,5
1980/75	+ 1,5	+ 6,5	- 3,5
nachrichtlich:			
Terms of Trade 1980[2] (1975=100)	96,6	96,0	98,7

7) 1) Für 1980 vorläufige Angaben.- 2) Index der Ausfuhrpreise in vH des Index der Einfuhrpreise.

Quellen: Zycie gospodarcze, Nr. 41/1980, Rocznik handlu zagranicznego 1980, und Trybuna Ludu vom 5. 2. 1981.
8)

Key:

1. Years
2. Total
3. Socialist countries
4. Nonsocialist countries
5. Exports
6. Imports
7. Footnotes in the table: 1) For 1980, provisional data; 2) index of export prices in % of the import price index.
8. Sources: ZYCIE GOSPODARCZE, No 41, 1980; Rocznik handlu zagranicznego 1980; TRYBUNA LUDU, 5 Feb 81.

On account of the sharp increase in Western imports during the period from 1971 to 1975, the growth rate of total imports during this period doubled in comparison to the second half of the 1960's. As a result of the curtailment of imports from the nonsocialist countries during the period from 1976 to 1980[4]--which considerably aggravated Poland's supply situation--the rate of growth of total imports declined considerably.

Table A3 shows that during the period from 1976 to 1979--in contrast to the preceding 5 years--the Polish Foreign Trade Ministry obviously succeeded in meeting the plan targets for imports from the West. The fact that during this period the deficit in Western trade exceeded by U.S.$3 billion (i.e. by nearly 50 percent) the deficit projected must be attributed exclusively to nonfulfillment of the export plan. This result is in keeping with what had been assumed in regard to the capacities of government foreign-trade planning in the East European planned economies: within the framework of the government foreign-trade and valuta monopoly, fulfillment of the import plan is much more likely than is fulfillment of the export plan;

for exports largely depend on activities in foreign markets that are outside the sphere of influence of the planning agencies. This statement is not invalidated by the development during the period from 1971 to 1975, when the export plan targets were nearly met, while the import plan targets were greatly exceeded; for this must be attributed primarily to the euphoria of the first upswing phase of the Gierek Administration's "new economic policy" and thus probably was entailed by the times.

All in all, during the period from 1971 to 1979 the Polish deficit in trade transactions in convertible currencies amounted to just under $16 billion. Thus it was over half as much again as the deficit projected, primarily because of nonfulfillment of the export plans.

During the period from 1971 to 1979, Poland could finance no more than 70 percent of its imports from Currency Area II with its own export revenues (see Table A2). As regards the trade with Western industrialized countries, the average cover rate was as low as 63 percent, with annual fluctuations ranging between 105 percent (1971) and 52 percent (1976).

Breaking down the balances by key commodity groups, one notes marked differences between the period from 1971 to 1975 on the one hand and the following 5 years on the other hand (see Table A4). During the period from 1971 to 1975, the Polish deficit (just under $7 billion) resulted primarily from the trade in electrical engineering products (which term should be taken here in the broad Polish definition), i.e. primarily producer goods (over $5 billion). At that time, the Western industrialized countries' share of Poland's total imports of this group of products increased sharply--by over 25 percent--to 49 percent. Thus these imports represented an important--albeit not quantifiable--contribution to the domestic accumulation of fixed assets. During this period, investments in fixed assets increased by 18 percent annually, while the productive fixed assets of the industrial sector expanded by one-third. In 1975, Poland attained full employment.

During the period from 1976 to 1980, the development was different. The deficit amounted to just under $10 billion, primarily on account of the sharp increase in imports of agricultural products (from $1 billion to over $4 billion) and chemicals (from $1.7 billion to just under $4.5 billion). The--price-related--considerable improvement of the energy trade balance (from $2 billion to over $5 billion) was not sufficient to offset this disadvantageous development.

Thus an increasingly large part of the Western loans was used to pay for commodity imports rather than for capital goods. According to data supplied by the Polish Foreign Trade Ministry, in the 1970's $12 billion was spent just to finance the grain and fodder imports (including the interest on the loans).[5] This is the main reason why Gierek's "active credit policy" has failed; for a long time, it had no longer been a question of whether Poland should take up foreign loans, but merely how much, how soon and for what Poland should borrow. During the period from 1976 to 1979/80, the Polish leadership gradually came to ignore these criteria.

This development led to momentous consequences: Western imports were curtailed even in areas where they were absolutely necessary for Polish industry and agriculture. The following table shows the Polish economy's great dependence on Western imports in regard to key products.

Share of Key Raw Material Imports from Nonsocialist Countries of Poland's Total Imports (%; probably 1978)

Item	Percent
Tin	100
Tungsten ore	100
Fish meal	100
Grist and oil cake	100
Rubber	100
Leather	100
Coffee	100
Cocoa beans	100
Wool	99
Grain	99
Phosphates	77
Cellulose	60
Lead	55
Paper and cardboard	54
Metallurgical products	34
Iron ore	29
Oil	28
Petroleum products	27
Cotton	27

Source: HANDEL ZAGRANICZNY, No 12, 1980.

Development, Volume and Structure of Poland's Indebtedness to the West

The data available in the West on Poland's indebtedness in convertible currencies are fragmentary and not always free from inconsistencies.[6] But they enable us to draw a number of safe conclusions concerning the development, present volume and structure of these debts.

According to the official plan fulfillment report for 1980, Poland's indebtedness to the West at the end of the year totaled U.S.$23 billion, as compared with $20.4 billion in the preceding year.[7] The latter figure confirms the accuracy of the CIA estimate of Poland's indebtedness to the West, which is summarized in the following table.[8]

The rapid increase in Poland's foreign debt in the course of the 1970's is interconnected with the growing trade deficit vis-a-vis Currency Area II.

Incidentally, Poland's payments balance deficit (commodities, services and transfers) vis-a-vis the West was even greater; according to data supplied by the Polish Foreign Trade Bank (Bank Handlowy), during the period from 1976 to 1979, it amounted to U.S.$11 billion, i.e. $2 billion in excess of the trade balance deficit during the same period.

The national economy's growing encumbrance by the foreign loans is reflected in the debt settlement and interest rates. In the discussions on the problems

Selected Data on Poland's Indebtedness to the West

1) Jahr	Defizit gegenüber dem Währungsgebiet II 1) 2)	3) Verschuldung jeweils zum Jahresende		6) Jährliche Tilgungsraten	7) Jährliche Zinszahlungen	8) Schuldendienstquote 3)	9) Zinsendienstquote 4)
		4) Brutto	5) Netto 2)				
	in Mrd. US-$					in vH	
1971	- 0,10	1,14	0,76	-	-	-	-
1972	0,14	1,56	1,15	0,20	0,07	15,3	4,0
1973	1,61	2,80	2,21	0,30	0,19	19,4	7,5
1974	3,78	4,64	4,12	0,51	0,40	23,5	10,3
1975	6,79	8,01	7,38	0,74	0,48	28,0	11,0
1976	9,73	11,48	10,68	1,21	0,66	41,4	14,6
1977	11,74	13,97	13,53	1,97	0,92	56,8	18,1
1978	13,64	17,84	16,97	2,87	1,47	75,9	25,7
1979	15,84	21,10	20,00	3,60	2,20	88,2	33,4

10) 1)Kumulierte Werte.-2)Bruttoverschuldung abzüglich Forderungen an westliche Geschäftsbanken.-3)Tilgungs- und Zinszahlungen in vH der Exporterlöse im Währungsgebiet II.-4)Zinszahlungen in vH der Exporterlöse im Währungsgebiet II.

11) Quellen: National Foreign Assessment Center: Estimating Soviet and East European Hard Currency Debt, Washington 1980, und Tabelle A 2.

Key:

1. Year
2. Deficit vis-a-vis Currency Area II
3. Indebtedness at the end of the given year
4. Gross
5. Net
6. Annual repayment rates
7. Annual interest payments
8. Debt settlement rate
9. Interest rate
10. Footnotes in the table: 1) Cumulative values; 2) gross indebtedness minus claims vis-a-vis Western banks; 3) repayment and interest rates in % of the export revenues in Currency Area II; 4) interest payments in % of the export revenues in Currency Area II.
11. Sources: National Foreign Assessment Center: "Estimating Soviet and East European Hard Currency Debt," Washington 1980; Table A2.

pertaining to the nation's foreign debt, a repayment rate of 25 percent frequently is considered a "alarm signal." The World Bank--according to which the 1985 debt settlement rate for oil-importing developing countries of medium income (the 1978 per capita GNP averaged U.S.$1,250) amounts to 29 percent--refers in this connection to a critical level.[9] However, historical experience does not support the assumption that there may be a critical level of this rate; consequently, its applicability as an indicator regarding the assessment of a country's indebtedness is limited.[10] As regards the actual encumbrance of the payments balance, the interest rate is of significance insofar as the interest payments--in contrast to the repayment rates--cannot be refinanced.

The repayment rate also depends to a large extent on the due dates of the loans taken up. According to the above-mentioned CIA estimate, at the end of 1979 38 percent of the loans taken up by Poland were due in 1980; 20 percent are due in 1981, and the rest, in the next few years. If one accepts the data of the Bank Handlowy--which do not take into account short-term loans (maturity under 2 years)--the due dates are as follows: 1980: 27 percent; 1981: 27 percent; 1982 and later: 46 percent.[11] According to the Polish Foreign Trade Ministry, over 70 percent of all medium- and long-term liabilities contracted by the end of last year will become payable between 1981 and 1983;[12] this illustrates the urgency of the Polish demand for debt conversion.

Of great significance in connection with the discussion on debt conversion is the question concerning the share of the officially backed debt and of the loans granted by private commercial banks (commercial debt). According to CIA estimates, the share of the commercial debt in Poland's total foreign debt has leveled off at 75 percent in the last few years. According to other sources, the officially backed debt accounts for between one-fourth and one-third of the Polish debt.[13]

A second distinction, which partially overlaps with the distinction mentioned,[14] is that between trade-related credits and financial credits. Table A5 shows the relation between the two types of credit during the period from 1978 to 1979.

This table also provides information regarding Poland's most important creditors; generally speaking, very little information is available in this regard. Portes presents an OECD list of the most important state creditors (order as of end of 1977): France, Austria, Great Britain, Federal Republic of Germany, Japan, United States, Italy, Sweden, Belgium, Switzerland and Canada; Portes points out, however, that in the last few years the United States has moved up a number of places on account of Poland's credit-financed grain purchases.[15] A Polish list of creditors (end of 1980) is headed by the Federal Republic of Germany,[16] the United States, France, Great Britain and Austria; it is not by accident that the government representatives of these five states are a kind of "task force" in the debt conversion negotiations between Poland and the state creditors.

Ways and Means of Solving the Polish Debt Problem

Under the present economic conditions, it is impossible to make any predictions concerning the future development of the Polish payments balance vis-a-vis the West. The above-mentioned 3-year stabilization plan for the period from 1981 to 1983 is supposed to create the economic conditions necessary for gradual equalization of this balance. One can safely assume--and this concurs with Polish estimates--that this goal will not be attained until 1984, most likely not until 1986. Thus Poland's Western liabilities are bound to increase further, presumably to between U.S.$30 billion and $33.5 billion. To be sure, the annual rate of incurring new debts will be declining (according to some estimates, from $3.5 billion in 1981 to 0.7 billion in 1985) and in Poland this is considered a precondition for maintaining the country's borrowing power in the Western money markets.

In view of this situation, one can assume that from 1981 until 1983 Poland's credit requirements will total $28 billion to 30 billion; of this total, conversion of payable repayment installments accounts for $19 to 21 billion; the rest is "new money" for financing the current payments balance deficits.

Poland needs this extensive support by the Western creditors as a kind of "help for self-help." For without this credit allocation, it will be impossible to implement the program for increasing exports--which is quite ambitious anyway. For in the next few years the Polish Government wants to increase the country's exports to the West by nominally 14 to 15 percent annually so as to be able to increase Western imports by an average of 4 to 5 percent; according to Polish estimates, in real terms this would mean an annual increase in exports by 3 to 5 percent[17] and a decline in imports by 5 to 6 percent annually. On the other hand, some economic theorists argue that in order to be able to reduce Poland's foreign debt in the second half of this decade the increase in the country's Western exports would have to exceed by 12 to 13 percentage points the increase in imports.[18] This would be equivalent to a real reduction of Western imports by 8 percent annually. It is doubtful whether the Polish economy could overcome all this without a decline in economic growth or other dislocations. In the short term, the only way to reduce these difficulties would be to curtail agrarian imports through a lasting increase in domestic production.

In consequence of the plan to equalize the payments balance, in the coming years--in contrast to the last decade--Poland's domestic production (the national income produced) must grow at a faster rate than domestic commodity consumption (national income consumed). To minimize the negative effects of this policy on the living standard of the Polish people, it is planned radically to curtail investments: the macroeconomic investment rate (investments as a percentage of the national income consumed)--which in 1975 totaled 28 percent, and in 1979, 23 percent--is to be reduced to 14 percent by the end of 1983. But even in that case it is doubtful whether private and public consumption can be maintained at the previous level. The trade unions claim that to reduce Poland's indebtedness to the West by the end of this century, one would have to allocate annually 10 percent of the GNP,[19] but these figures cannot be substantiated.

Finally, there is the question concerning the conditions attaching to the new loans granted to Poland; for the Western--public and private--creditors obviously are no longer prepared to make available new funds without the possibility of exerting a certain influence on Poland's economic policy. Poland does not belong to the International Monetary Fund;[20] consequently, debt conversion along IMF lines is out of the question. The IMF usually imposes on the borrowing country strict economic policy-related conditions, thus increasing the creditors' surety. As an alternative, the Polish Government could at regular intervals inform the Western creditor states--represented by the so-called Committee of Five--on the goals and the development of its economic policy. Finally, there is a political approach: The Western creditors could implement the Polish debt conversion in collaboration with the CEMA states, which would be represented by the CEMA Investment Bank; for the CEMA countries, above all the Soviet Union, likewise want to see the Polish Government overcome the present economic crisis.

FOOTNOTES

1. According to the most recent data, the capacity utilization rate presently amounts to no more than 60 percent; as regards the newly established production equipment, the utilization rate does not exceed 50 percent (see ZYCIE GOSPODARCZE, No 9, 1981).

2. Albania, Bulgaria, People's Republic of China, CSSR, GDR, Yugoslavia, North Korea, Cuba, Mongolia, Romania, USSR, Hungary and Vietnam.

3. OECD countries and South Africa.

4. It is estimated that in 1980 alone Western imports declined--in real terms--by 11 percent.

5. See TRYBUNA LUDU, 15 Jan 81.

6. See above all Richard Portes, "The Polish Crisis: Western Economic Policy Options," London, 1981.

7. This is the first time that the country's indebtedness has been officially disclosed (see TRYBUNA LUDU, 5 Feb 81). According to representatives of the "Solidarnosz" Union, however, Poland's foreign debt totals over U.S.$26 billion (see ZYCIE GOSPODARCZE, No 9, 1981.

8. By and large, the CIA estimate conforms with other Western estimates: According to the Bankers Trust Company, Poland's Western debt totals--in gross--$21 billion (1979) and $17.5 billion (1978); the Chase Manhattan Bank states the debt amounts to a net total of $20.7 billion (1979) and $17.0 billion (1978). It is not known, however, whether these estimates were produced independently.

9. See "World Development Report 1980," Washington, 1980, pp 14 and 32 ff.

10. See "Debt Problems of Developing Countries," OECD, Paris, 1974.

11. These loans were in the following amounts (billion U.S. dollars): 1980: 5.24; 1981: 5.16; 1982 and later: 9 (see R. Portes, op. cit., p 58).

12. TRYBUNA LUDU, 15 Jan 81.

13. NEUE ZUERCHER ZEITUNG, 28 Feb 81.

14. In 1980, Poland applied for Western loans in the amount of $7.7 billion. Of this total, officially-backed debt was to account for 63 percent; trade-related credit was to account for 50 percent, and financial credit, for 13 percent; the rest would be private bank loans; of this remainder, financial credit was to account for 20 percent, and trade-related credit, for 16 percent (see THE ECONOMIST, 21 Feb 81).

15. See R. Portes, op. cit., p 27.

16. As to the extent of Polish borrowing in the FRG, there are great differences of opinion between Polish and German institutions. According to Polish data, at the end of 1979 Poland's indebtedness to FRG banks totaled $4.7 billion; German banking circles claim the Polish debt amounted to no more than $2.6 billion.

17. Such a volume should be well within the limits of the OECD markets, provided that no new protectionist measures impede East-West trade. See

Jochen Bethkenhagen; Hans Martin Duseberg; Maria Lodahl, and Heinrich Machowski, "RGW, EG und Ost-West-Handel--Moeglichkeiten der gesamteuropaeischen Zusammenarbeit unter den Bedingungen der regionalen Teilintegration" [CEMA, EC and East-West Trade—Possibilities Regarding All-European Cooperation Under Conditions of Partial Regional Integration], DIW report reproduced in manuscript form, Berlin, 1980, pp 269 ff.

18. See Zbigniew Karcz, "Once More on the Problem of Indebtedness," HANDEL ZAGRANICZNY, No 12, 1980, pp 6 ff.

19. See ZYCIE GOSPODARCZE, No 9, 1981, p 11.

20. The Polish trade unions consider Poland's--politically related--nonaffiliation with the IMF to be a great obstacle to the country's foreign-trade policy (ibid.).

Table A 1. Indicators of Poland's Economic Development, 1960-1980 (real changes,%)

Indikatoren 1)	1970/60[1]	1975/70[1]	1980/75[1]	1979/78	1980/79
Produziertes Nationaleinkommen 2)	+ 6,0	+ 9,8	+ 1,7	- 2,3	- 4
Verwendetes Nationaleinkommen[2] 3)	+ 5,8	+ 12,0	+ 0,5	- 3,3	- 4
Beschäftigte[3] 4)	+ 3,3	+ 3,5	+ 0,6	+ 0,1	- 0,1
Arbeitsproduktivität 5)	+ 2,6	+ 6,1	+ 1,4	- 2,4	- 2
Bruttoproduktion der Industrie 6)	+ 8,4	+ 10,4	+ 4,4	+ 2,1	- 1,3[4]
davon: Produktionsgüter 7)	+ 9,6	+ 10,6	.	+ 1,6	.
Konsumgüter 8)	+ 6,6	+ 10,4	.	+ 2,4	.
Bruttoproduktion der Landwirtschaft 9)	+ 2,3	+ 3,7	- 1,8	- 1,4	- 9,6
davon: Pflanzliche Produktion 10)	+ 2,6	+ 2,3	- 3,9	- 3,8	- 15,2
Tierische Produktion 11)	+ 1,9	+ 5,3	+ 0,8	+ 1,4	- 3,3
Bruttoanlageinvestition 12)	+ 7,4	+ 18,4	- 2,2	- 7,9	- 10,5
Anlagevermögen[5] 13)	+ 5,1	+ 8,0	+ 8,1	+ 7,9	+ 4,0
Export 14)	+ 10,2	+ 10,7	+ 4,0	+ 5,7	- 4,3
Import 15)	+ 9,4	+ 15,4	+ 1,2	- 2,4	- 2,8
Reallöhne und -gehälter[3] 16)	+ 1,8	+ 7,2	+ 1,6	+ 1,2	+ 2,5
nachrichtlich: 17)					
Geldeinnahmen der Bevölkerung 18)	+ 6,6	+ 13,0	+ 10,8	+ 9,0	+ 11,5
Nominallöhne und -gehälter[3] 19)	+ 3,7	+ 9,8	+ 8,7	+ 8,8	+ 12,8
Lebenshaltungskosten 20)	+ 1,9	+ 2,4	+ 7,0	+ 7,5	+ 10

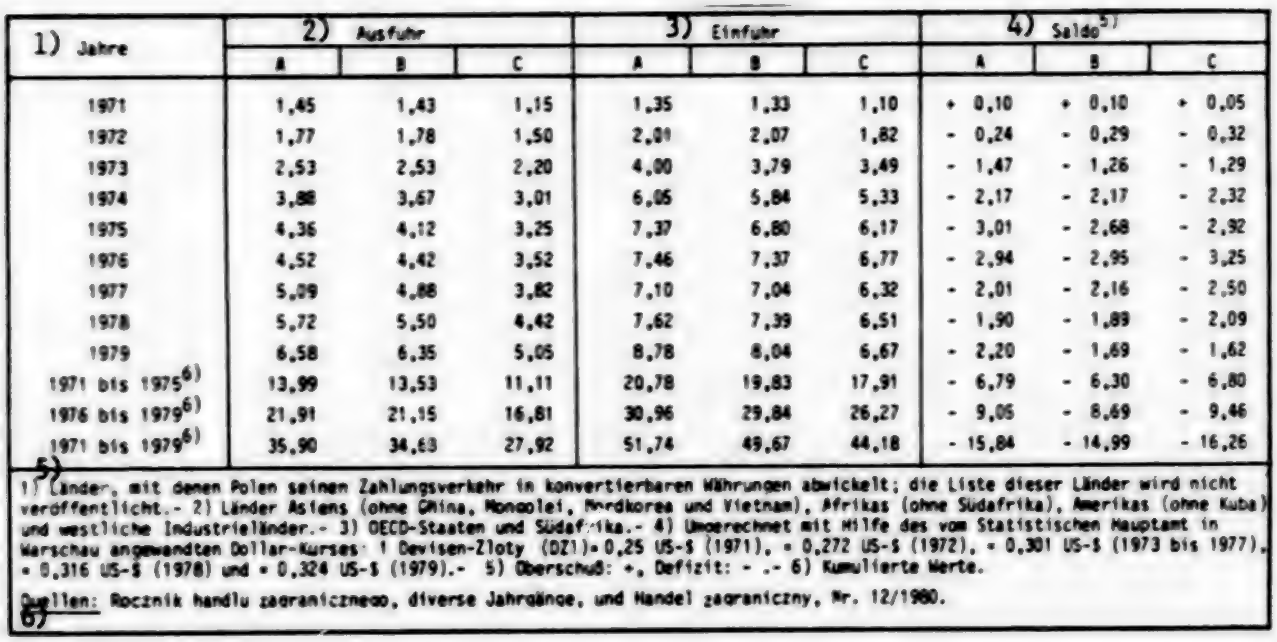
21) 1) Im Jahresdurchschnitt.- 2) Inlandsverwendung von Gütern und materiellen Leistungen. Das verwendete Nationaleinkommen unterscheidet sich vom produzierten Nationaleinkommen im wesentlichen durch den Außenbeitrag.- 3) Ohne Privatwirtschaft.- 4) Umsatz.- 5) Im produzierenden Bereich.

Quelle: Zycie gospodarcze, Nr. 40/1980, und Trybuna Ludu vom 5. 2. 1981.
22)

Key:

1. Indicators
2. National income produced
3. National income consumed
4. Manpower
5. Labor productivity
6. Gross industrial output
7. Incl.: Producer goods
8. Consumer goods
9. Gross agricultural output
10. Incl.: Plant produce
11. Animal produce
12. Gross investments in fixed assets
13. Fixed assets
14. Exports
15. Imports
16. Real wages and salaries
17. Based on reports
18. Monetary income of the population
19. Nominal wages and salaries
20. Cost of living
21. Footnotes in the table: 1) Annual average; 2) domestic consumption of goods and material services; it is the external contribution that constitutes the main difference between the national income consumed and the national income produced; 3) excluding the private sector; 4) turnover; 5) in the producing sector
22. Source: ZYCIE GOSPODARCZE, No 40, 1980
    TRYBUNA LUDU, 5 Feb 81

Table A 2. Development of Poland's Foreign Trade With Countries of Currency Area II[1] (A), Nonsocialist Countries[2] (B), and Western Industrialized Countries[3] (C), 1971-1979 (billion U.S. dollars)[4]



1) Jahre	2) Ausfuhr			3) Einfuhr			4) Saldo[5]		
	A	B	C	A	B	C	A	B	C
1971	1,45	1,43	1,15	1,35	1,33	1,10	+ 0,10	+ 0,10	+ 0,05
1972	1,77	1,78	1,50	2,01	2,07	1,82	- 0,24	- 0,29	- 0,32
1973	2,53	2,53	2,20	4,00	3,79	3,49	- 1,47	- 1,26	- 1,29
1974	3,88	3,67	3,01	6,05	5,84	5,33	- 2,17	- 2,17	- 2,32
1975	4,36	4,12	3,25	7,37	6,80	6,17	- 3,01	- 2,68	- 2,92
1976	4,52	4,42	3,52	7,46	7,37	6,77	- 2,94	- 2,95	- 3,25
1977	5,09	4,88	3,82	7,10	7,04	6,32	- 2,01	- 2,16	- 2,50
1978	5,72	5,50	4,42	7,62	7,39	6,51	- 1,90	- 1,89	- 2,09
1979	6,58	6,35	5,05	8,78	8,04	6,67	- 2,20	- 1,69	- 1,62
1971 bis 1975[6]	13,99	13,53	11,11	20,78	19,83	17,91	- 6,79	- 6,30	- 6,80
1976 bis 1979[6]	21,91	21,15	16,81	30,96	29,84	26,27	- 9,05	- 8,69	- 9,46
1971 bis 1979[6]	35,90	34,63	27,92	51,74	49,67	44,18	- 15,84	- 14,99	- 16,26

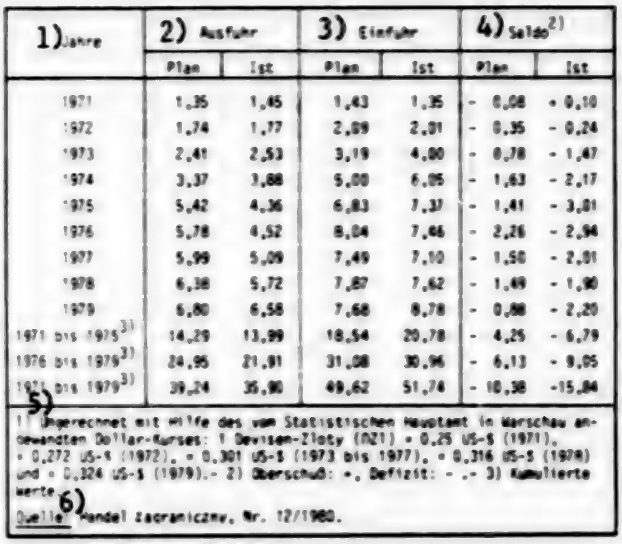
5) 1) Länder, mit denen Polen seinen Zahlungsverkehr in konvertierbaren Währungen abwickelt; die Liste dieser Länder wird nicht veröffentlicht.- 2) Länder Asiens (ohne China, Mongolei, Nordkorea und Vietnam), Afrikas (ohne Südafrika), Amerikas (ohne Kuba) und westliche Industrieländer.- 3) OECD-Staaten und Südafrika.- 4) Umgerechnet mit Hilfe des vom Statistischen Hauptamt in Warschau angewandten Dollar-Kurses: 1 Devisen-Zloty (DZl) = 0,25 US-$ (1971), = 0,272 US-$ (1972), = 0,301 US-$ (1973 bis 1977), = 0,316 US-$ (1978) und = 0,324 US-$ (1979).- 5) Überschuß: +, Defizit: - .- 6) Kumulierte Werte.

Quellen: Rocznik handlu zagranicznego, diverse Jahrgänge, und Handel zagraniczny, Nr. 12/1980.
6)

Key:

1. Years
2. Exports
3. Imports
4. Balance
5. Footnotes in the table: 1) Countries with which Poland transacts the monetary transfers in convertible currencies; the list of these countries is not published; 2) countries in Asia (excluding China, Mongolia, North Korea and Vietnam), Africa (excluding South Africa), America (excluding Cuba) and Western industrialized countries; 3) OECD states and South Africa; 4) converted on the basis of the dollar rate used by the Warsaw Central Statistical Office: 1 valuta zloty = U.S.$0.25 (1971), = $0.272 (1972), = $0.301 (1973-77), = $0.316 (1978), = $0.324 (1979); 5) surplus: +; deficit: -; 6) Cumulative values
6. Sources: "Rocznik handlu zagranicznego," various years;
   HANDEL ZAGRANICZNY, No 12, 1980

Table A 3. Planned and Actual Development of Poland's Foreign Trade With Countries of Currency Area II, 1971-1979 (billion U.S. dollars[1])



1) Jahre	2) Ausfuhr		3) Einfuhr		4) Saldo[2]	
	Plan	Ist	Plan	Ist	Plan	Ist
1971	1,35	1,45	1,43	1,35	- 0,08	+ 0,10
1972	1,74	1,77	2,09	2,01	- 0,35	- 0,24
1973	2,41	2,53	3,19	4,00	- 0,78	- 1,47
1974	3,37	3,88	5,00	6,05	- 1,63	- 2,17
1975	5,42	4,36	6,83	7,37	- 1,41	- 3,01
1976	5,78	4,52	8,04	7,46	- 2,26	- 2,94
1977	5,99	5,09	7,49	7,10	- 1,50	- 2,01
1978	6,38	5,72	7,87	7,62	- 1,49	- 1,90
1979	6,80	6,58	7,68	8,78	- 0,88	- 2,20
1971 bis 1975[3]	14,29	13,99	18,54	20,78	- 4,25	- 6,79
1976 bis 1979[3]	24,95	21,91	31,08	30,96	- 6,13	- 9,05
1971 bis 1979[3]	39,24	35,90	49,62	51,74	- 10,38	-15,84

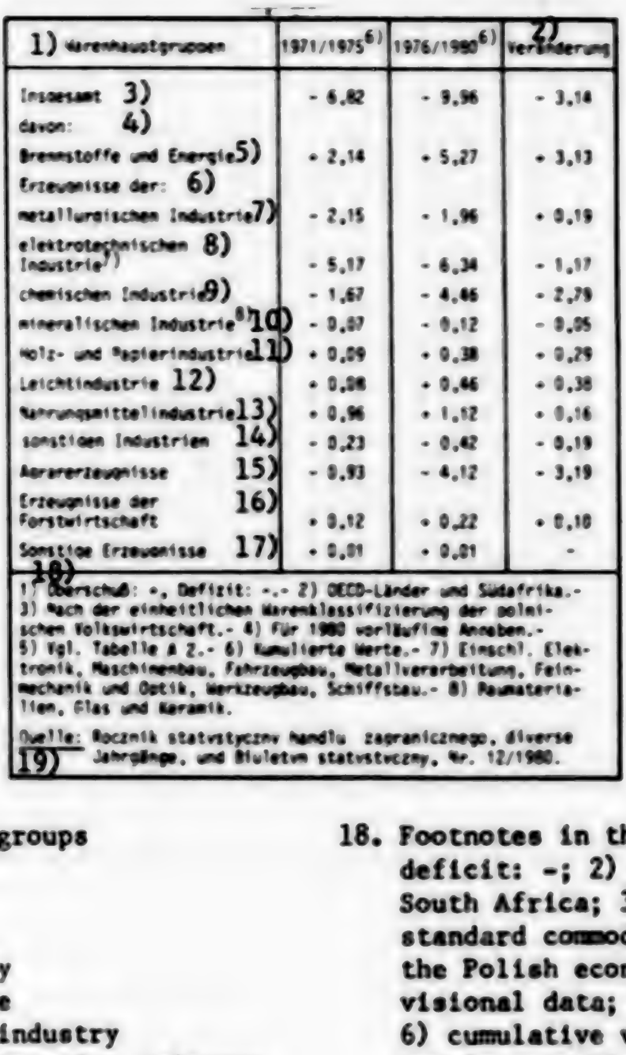
5) [1] Umgerechnet mit Hilfe des vom Statistischen Hauptamt in Warschau angewandten Dollar-Kurses: 1 Devisen-Zloty (DZl) = 0,25 US-$ (1971), = 0,272 US-$ (1972), = 0,301 US-$ (1973 bis 1977), = 0,316 US-$ (1978) und = 0,324 US-$ (1979).- [2] Überschuß: +, Defizit: - .- [3] Kumulierte Werte.

6) Quelle: Handel Zagraniczny, Nr. 12/1980.

Key:

1. Year
2. Exports
3. Imports
4. Balance
5. Footnotes in the table: 1) Converted on the basis of the dollar rate used by the Warsaw Central Statistical Office: 1 valuta zloty = for the individual dollar rates, see Key of Table A 2 (table footnote 4)
6. Source: HANDEL ZAGRANICZNY, No 12, 1980

Table A 4. Balances[1] of Poland's Foreign Trade With Western Industrialized Countries[2], Broken Down by Key Commodity Groups[3], 1970-1980[4]



1) Warenhauptgruppen	1971/1975[6]	1976/1980[6]	2) Veränderung
Insgesamt 3)	- 6,82	- 9,96	- 3,14
davon: 4)			
Brennstoffe und Energie 5)	+ 2,14	+ 5,27	+ 3,13
Erzeugnisse der: 6)			
metallurgischen Industrie 7)	- 2,15	- 1,96	+ 0,19
elektrotechnischen Industrie[7] 8)	- 5,17	- 6,34	- 1,17
chemischen Industrie 9)	- 1,67	- 4,46	- 2,79
mineralischen Industrie[8] 10)	- 0,07	- 0,12	- 0,05
Holz- und Papierindustrie 11)	+ 0,09	+ 0,38	+ 0,29
Leichtindustrie 12)	+ 0,08	+ 0,46	+ 0,38
Nahrungsmittelindustrie 13)	+ 0,96	+ 1,12	+ 0,16
sonstigen Industrien 14)	- 0,23	- 0,42	- 0,19
Agrarerzeugnisse 15)	- 0,93	- 4,12	- 3,19
Erzeugnisse der Forstwirtschaft 16)	+ 0,12	+ 0,22	+ 0,10
Sonstige Erzeugnisse 17)	+ 0,01	+ 0,01	-

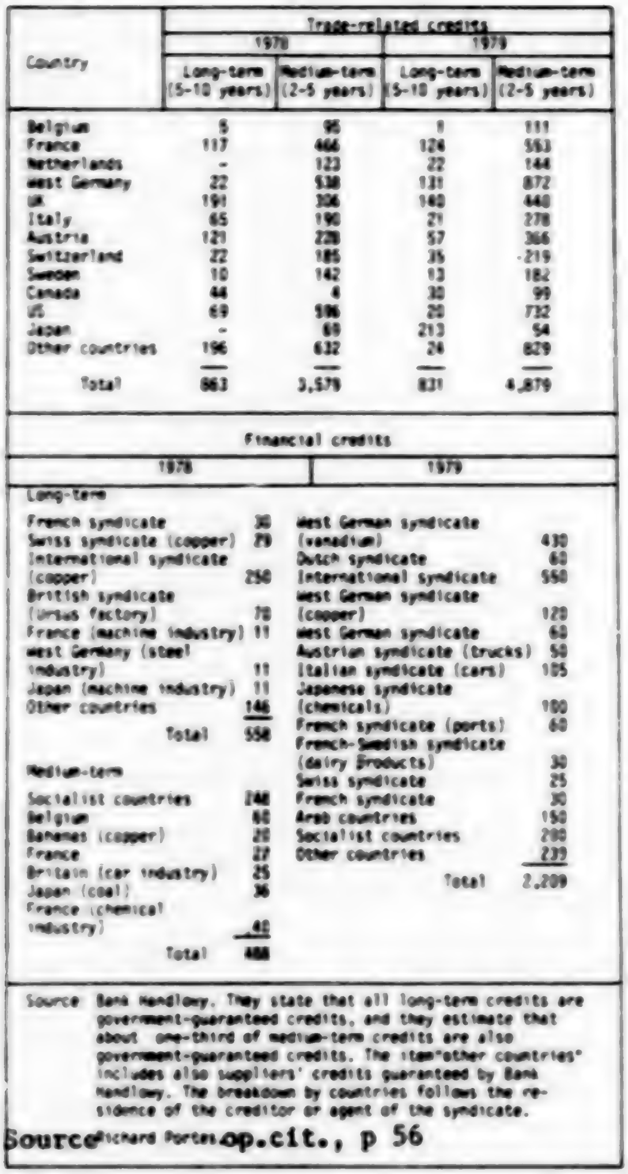
18) 1) Überschuß: +, Defizit: -.- 2) OECD-Länder und Südafrika.- 3) Nach der einheitlichen Warenklassifizierung der polnischen Volkswirtschaft.- 4) Für 1980 vorläufige Angaben.- 5) Vgl. Tabelle A 2.- 6) Kumulierte Werte.- 7) Einschl. Elektronik, Maschinenbau, Fahrzeugbau, Metallverarbeitung, Feinmechanik und Optik, Werkzeugbau, Schiffsbau.- 8) Baumaterialien, Glas und Keramik.

19) Quelle: Rocznik statystyczny handlu zagranicznego, diverse Jahrgänge, und Biuletyn statystyczny, Nr. 12/1980.

Key:

1. Key commodity groups
2. Change
3. Total
4. Incl.
5. Fuel and energy
6. Products of the
7. Metallurgical industry
8. Electrical engineering industry
9. Chemical industry
10. Mineralogical industry
11. Lumber and paper industry
12. Light industry
13. Food industry
14. Other industries
15. Agricultural products
16. Forest industry products
17. Other products
18. Footnotes in the table: 1) Surplus: +, deficit: -; 2) OECD countries and South Africa; 3) according to the standard commodity classification of the Polish economy; 4) for 1980, provisional data; 5) see Table A 2; 6) cumulative values; 7) incl. electronics, machine building, automobile construction, metalworking, precision mechanics and optics, machine tool building, shipbuilding; 8) building materials, glass and ceramics
19. Sources: "Rocznik statystyczny handlu zagranicznego," various years; BIULETYN STATYSTYCZNY, No 12, 1980

Table A 5. Long-Term and Medium-Term Borrowing, 1978 and 1979 (million U.S. dollars)



Country	Trade-related credits			
	1978		1979	
	Long-term (5-10 years)	Medium-term (2-5 years)	Long-term (5-10 years)	Medium-term (2-5 years)
Belgium	5	95	1	111
France	117	466	124	553
Netherlands	-	123	22	144
West Germany	22	538	131	872
UK	191	306	140	440
Italy	65	190	21	278
Austria	121	228	57	366
Switzerland	22	185	35	219
Sweden	10	142	13	182
Canada	44	4	30	99
US	69	596	20	732
Japan	-	69	213	54
Other countries	196	632	24	829
Total	863	3,579	831	4,879

Financial credits			
1978		1979	
Long-term			
French syndicate	30	West German syndicate	
Swiss syndicate (copper)	79	(vanadium)	430
International syndicate		Dutch syndicate	60
(copper)	250	International syndicate	550
British syndicate		West German syndicate	
(Ursus factory)	70	(copper)	120
France (machine industry)	11	West German syndicate	60
West Germany (steel		Austrian syndicate (trucks)	50
industry)	11	Italian syndicate (cars)	105
Japan (machine industry)	11	Japanese syndicate	
Other countries	146	(chemicals)	100
		French syndicate (ports)	60
Total	558	French-Swedish syndicate	
		(dairy Products)	30
Medium-term		Swiss syndicate	25
Socialist countries	248	French syndicate	30
Belgium	60	Arab countries	150
Bahamas (copper)	20	Socialist countries	200
France	27	Other countries	239
Britain (car industry)	25	Total	2,209
Japan (coal)	36		
France (chemical			
industry)	40		
Total	488		

Source: Bank Handlowy. They state that all long-term credits are government-guaranteed credits, and they estimate that about one-third of medium-term credits are also government-guaranteed credits. The item "other countries" includes also suppliers' credits guaranteed by Bank Handlowy. The breakdown by countries follows the residence of the creditor or agent of the syndicate.

Source: Richard Portes, op.cit., p 56

8760
CSO: 2300/297

LEGAL, INSTITUTIONAL ASPECTS OF EAST-WEST TRADE REVIEWED

Warsaw SPRAWY MIEDZYNARODOWE in Polish No 2 Feb 81 pp 15-28

[Article by Dr hab Krystyna Michalowska-Gorywoda, assistant professor at the Institute of International Law at the Main School of Planning and Statistics (SGPis)]

[Text] Immediately after the Second World War and during the 1950's a dominating form of economic relations determined the trade exchange, which in turn was primarily goods turnover. However, the steadily advancing development of productive forces, the intensifying international division of labor, and the improvement of international political relations, resulted in new forms of East-West economic cooperation. Since the second half of the 1960's, industrial cooperation as well as scientific and technical collaboration appeared between the socialist and capitalist countries. Industrial cooperation has all the makings to become the future form of collaboration that simultaneously activates the traditional exchange of goods.

Changes that occurred with material forms of economic cooperation among states with different social and political systems, also impacted the legal and institutional character of this cooperation.

Trade Agreements

From the end of the war until the mid-1950's trade between socialist and capitalist countries took place predominantly as bilateral intergovernmental commercial and payment agreements. Only in a short period, including the second half of 1945 and the beginning of 1946, commercial relations between certain newly established European socialist countries and capitalist countries of Western Europe were still based on prewar commercial pacts or were, in general, devoid of any contractual settlements[1]. Trade understandings from the first postwar decade were short-term agreements, generally for 1 year. Their scope reflecting the existing forms and scale of economic collaboration, was very narrow and applied predominantly to two issues: conditions of commercial exchange and system of account settlement for goods delivery. Agreement resolutions had a very detailed character and they assumed the form of very simple, often bound (commodity for commodity) commercial transactions, with a strictly limited number of articles. Although these agreements were intergovernmental, they resembled commercial transactions.[2]

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[1] Compare for example E. Palyga, "Binding Power of Polish Commercial Agreements Concluded Before 1 September 1939." LAW IN FOREIGN TRADE, 1973, fasc 31.

On the other hand, settlements of accounts, provided in agreements for deliveries, we in the majority of cases executed in clearing. In these agreements a prolongation clause was frequently included, with the agreements extended several times, as a rule by a 1-year period. Only quota lists attached to the agreements or supplementary protocols were subject to modification. The revision of quota lists or of supplementary protocols was entrusted to mixed committees instituted by certain agreements. However, natural premises for the development of economic East-West cooperation, which appeared after the Second World War, were seriously affected at the beginning of the 1950's by the new political and economic situation. The intensification of political tension and the economic blockade of socialist countries also affected the character of mutual treaty relations. During this period tendencies to conclude new economic agreements, even for the period of one year, weakened; most often previously concluded understandings were extended. At times, however, even such an extension did not occur; that resulted in nonagreement, which, for example, occurred with Poland and France in 1950 and in the first half of 1951. Evidently, it is difficult to evaluate how much a lack of legal basis for the Polish-French trade exchange affected the value of turnover between these two countries; nevertheless, negative consequences are recognized.[3]

Tendencies initiated in the mid-1950s for the reduction of political tensions, as well as for the normalization of economic relations between countries with different socioeconomic systems, resulted in substantial modifications in the legal and institutional frameworks of economic cooperation. From the mid-1950's one notices a rapid retreat from yearly economic agreements as not providing a formal guarantee of long-term exchange, and a tendency to establish long-term understandings, developed more formally and substantially. The first such agreement, signed during the so-called cold war, was the commercial pact concluded for the years 1951 to 1955 between the Soviet Union and Finland. From the mid-1950's other socialist countries started entering bilateral long-term commercial agreements with capitalist countries, predominantly from Western Europe. Initially, these long-term commercial understandings were concluded for 2 to 3 years, and later for 5 years.

The long-term commercial agreements, supplemented with annual protocols, had a much wider scope than the annual pacts. Clauses in these agreements reflected contemporary detente tendencies in East-West commerce. They applied most favored nation clauses and liberalized turnover, diversificated exchange structure, mostly through the extension of machines and appliances participation. These were remarkably important for the actuation of exports from socialist countries to the capitalist markets and also for credit transactions. In these agreements, lists and guaranties of quantities of goods for exchange were included; generally they were only indicative character and thereby not strictly limiting the balance of commercial and financial flow between the parties. Toward the end of the 1950's--along with the reinstatement

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2. S. Dlugosz, "Assumptions of Economic Agreements with Developed Capitalist Countries." LAW IN FOREIGN TRADE, 1971, fasc 26-27.

3. S. Dlugosz, W. Szczepaniec, ECONOMIC RELATIONS OF POLAND WITH THE DEVELOPED CAPITALIST COUNTRIES. Warsay 1974, p 225.

of the West-European capitalist currency convertibility and of the socialist countries in mutual settlements of accounts, a departure occured in many cases from the clearings system, with a transition to settlements in convertible currencies. For example, the USSR and Italy turned to settlements in convertible currency (Italian lira) in 1957, and the USSR and France in 1960. Despite the widely observed tendency for settlements in convertible currency, toward the end of the 1950's, clearings were still operative for 30 percent of European East-West commerce.

As normalizing tendencies were strengthening in commercial East-West exchanges, expressed in a slow but steadily progressing liberalization in the capitalist countries of imports from socialist countries, so the quantity as well as the scale and the contents of clauses inserted in bilateral long-term commercial agreements, we also changing.

Agreements on Economic Cooperation

From the second half of the 1960's, economic cooperation broadened between socialist and capitalist countries. In regard to industrial cooperation and scientific and technical collaboration, constantly growing significance of these new forms of collaboration required proper legal and institutional adjustment and frameworks to permit maximizing potential benefits, especially in industrial cooperation.

Initially, the treaty practice progressed in two directions. In the first period (the end of the 1960's and beginning of the 1970's) agreements concerning economic collaboration, and thus including industrial cooperation and scientific and technical collaboration, were concluded on the government level, either independently from commercial agreements or, in certain cases, included in commercial agreements as appropriate clauses on economic agreements, usually already included in the title. Both solutions were applied by individual socialist countries in their treaty relations with European countries. For example, Poland, which among socialist countries from the beginning displayed a particular treaty activity in with capitalist countries, in the second half of the 1960's concluded agreements on economic, industrial and technical collaboration, independent of commercial agreements. Such understandings have been signed by Poland with West-European countries such as Italy (1965), Belgium (1965) and Holland (1967). On the other hand, in 1969, applying the second method of contractual formulation in negotiating economic collaboration, Poland signed with France a 5-year agreement for trade and economic and industrial collaboration. This agreement stipulated that countries, as parties to such agreements, are interested in the development and intensification of their economic relations not only in terms of a traditional trade turnover but also of a broadly understood economic collaboration and, in particular, industrial cooperation. In this connection, both countries committed themselves "to facilitate the implementation of transactions pertaining to this collaboration. With this aim the sides agreed to grant to each other the most favored nation clause within the framework of their legal rules, particularly as concerns the system of import, customs and financial procedures" (art 3, par 2 of the agreement). Considering numerous tariff walls in mutual commerce--among them, and in particular, quantitative restrictions--both countries stipulated that they would undertake necessary measures in order that "deliveries resulting from transactions concerning collaboration would be realized without quantitative restrictions" (art 3, par 2).

Almost identical commitments for industrial cooperation between the contracting parties are included in the agreement on the goods exchange and economic, scientific and technical collaboration, signed by Poland and the FRG (for 1970-1974) and also by Poland and Great Britain (1971). In this respect the procedure of other socialist countries was similar to Poland's.

On the basis of economic collaboration agreements on the governmental level, enterprises, firms and economic organizations of contracting parties signed direct cooperation contracts. The control of implementation in intergovernmental agreements on economic collaboration was entrusted to commissions or mixed committees, which included representatives of both sides.

In time, the range of articles as well as the period of binding time for intergovernmental agreements on economic cooperation was constantly extended. For example, the relatively wide range of articles of economic collaboration has been provided by the economic collaboration and commercial exchange between Poland and the FRG, concluded in 1970. The following have been included in economic collaboration and cooperation:

a) Mutual deliveries of raw materials, intermediate products, parts and subassemblies for their processing, tooling (including the turnover of finished goods) and assembly in one or both countries, as well as the sale of goods to the market of one or both countries, independently of where these products have been deployed or refined, or to third markets;

b) expansion and modernization of existing plants or construction of new plants, modernization of technical or technological processes in one or both countries by delivery of machines and technical equipment or licenses, know-how, technical and technological documentation by economic units of the second country interested in obtaining products manufactured on the basis of delivered equipment, licenses and so on;

c) deliveries of raw materials, intermediate products, parts and subassemblies or end products for the current production of economic units of the second country for the expansion or completion of their production program or sale. Initially the binding time of these agreements generally was a 5-year period. Such pacts are now on principle, concluded for 10 years; 27 October 1971, for the first time in economic relations between countries with different sociopolitical systems, a long-term agreement on economic, industrial and scientific-technical collaboration was signed between the USSR and France. Nevertheless, agreements are also concluded for longer periods; for example, the understanding on the development and intensification of a long-term economic and industrial collaboration between the USSR and the FRG, concluded on 6 May 1978 in Bonn for 25 years.[4]

In the 1970's this qualitatively new legal and institutional basis of economic East-West collaboration developed rapidly. In a decisive majority of cases they

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4. WNIESHNIAYA TORGOVLIA [FOREIGN TRADE], No 8 p 59.

are binding along the commercial agreements of long standing.[5] However, in particular situations the long-term agreements on economic collaboration temporarily constitute the only bilateral contractual framework of these relations. This happens, for example, in the treaty practice between CEMA and EEC; because of the EEC commercial toward third countries, commerce between these parties occurs without contractual bases, on the strength of autonomous decisions of EEC authorities.

Agreements on economic cooperation have a framework character from the point of view of collaboration, as well as of realization means. They do not constitute a formal commitment from the countries parties to these agreements--for specific activities; however, they obligate them to create a favorable atmosphere for collaboration, undertaken in certain fields by proper groups, as provided by these agreements. Direct relations of collaboration are left to business concerns, economic organizations and associations of the contracting parties.

The essential purpose of long-term agreements is promoting, facilitating and strengthening the economic, industrial and scientific-technical collaboration;[6] taking advantage of new possibilities of collaboration, resulting from the economic development of partners, and creating continuous and stable perspectives of cooperation on the basis of long-range activities.

In every agreement the preferred fields of cooperation are enumerated by the interested parties. In certain cases such definition has a more explicit character; in other cases, general or exemplary character. All agreements provide the possible expansion of the range of cooperation.

Forms of economic, industrial and scientific-technical cooperation vary greatly. With industry and other subsections of the economy, the cooperation between enterprises and the economic organizations of the contracting parties may be carried out by direct contacts between them, such as common research in the field of planning and common undertakings, common research works and cooperation in the production and sale of particular industrial products, and sometimes expansion of mutual tourism.

In technical cooperation and in applied sciences, the long-term agreements provide the following: exchange of licenses and technical documentation, exchange of information, cooperation in developing new technologies, common elaboration of subjects in the field of applied science, advancement and exchange of technical personnel, and organization of conferences, seminars and exhibitions.

All these explicitly mentioned, as well as other, forms of cooperation are realized by proper economic subjects of contracting parties, while governments of states--the parties to the agreement--perform only the role of stimulator in establishing contacts between industries, economic organizations and domestic organizations as the actual agents of cooperation. Only relations established between actual agents of cooperation have the character of commitment.

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[5] From the document of the Economic and Social Council of the UN "Register of Long-Term Agreements on Economic Cooperation and Trade" (TRADE/R 388, 13 September 1979) commercial agreements binding in mid-1979 between socialist and capitalist countries amounted to 106, while commercial and technical agreements amounted to 177.

[6] As a rule, the issues of scientific-technical collaboration are included in the stipulations of these agreements. However, agreements on these subjects are sometimes concluded separately.

In long-term agreements on economic cooperation established between socialist and capitalist countries, particular attention is attached to industrial cooperation, considering the role of this form of cooperation in intensification, change of structure and better equalization of trade turnover between particular countries. Such agreements stress government support for all initiatives aimed at establishing cooperative relations. However, as in relation to other forms of cooperation, these decisions are more declaratory, particularly for capitalist countries. Whose influence on the activity of establishments is limited.[7] Cooperative undertakings have to be implemented on the basis of long-term understandings, concluded between establishments of interested countries under the laws of the given countries. The long-term nature of cooperative contracts has to secure durability for this form of cooperation. It has an essential significance, because it is consistent with the character of manufacturing and modernization of products' process and acts long-term for the stabilization and improvement of the trade exchange structure with foreign countries.[8]

The form of industrial cooperation is decided by the interested enterprises. Certain international agreements give examples of cooperation forms; these do not, as a rule, cover the range of potential possibilities. In most agreements, the territorial range of cooperative undertakings is not limited to that of the contracting parties but includes third countries.

Financing is a very essential matter in establishing cooperation between enterprises of socialist and capitalist countries. This problem is reflected in proper intergovernmental agreements. The contracting parties advise that, in agreements and contracts between financial and banking institutions of the interested countries, the objectives and assignments of long-term agreements on economic collaboration and industrial cooperation be considered. In particular, conditions of credit, which--by governments' declarations--should be as convenient as possible, have priority. All activities on behalf of economic, industrial, scientific and technical cooperation, in accordance with the pacts, will be undertaken in the most liberal spirit, not disturbing the international commitments of countries, as parties to the agreement.

Contracting parties, resolve themselves first to commitments from their membership in GATT. Long-term agreements on economic cooperation do not include explicit provisions directly concerning trade exchange and policy--i.e., they don't include standard clauses for commercial agreements in certain formulations of these agreements. However, there still are ideas from commercial policy. The question here particularly concerns statements that economic cooperation, and primarily

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7. A. Calus, "Legal Aspects of Industrial Cooperation With Capitalist Countries." FOREIGN TRADE, 1974, No 10.

8. M. Dobroczynski, "International Industrial Cooperation in Europe." INTERNATIONAL AFFAIRS, 1975, No 3.

industrial cooperation--which stimulates the growth of commercial exchange--will profit from the most favorable treatment, based on rules binding in contracting countries. This most privileged treatment will relate, among other things, to customs duties and liabilities applying to export or import of goods and services, and methods of establishing such payments or liabilities, rules or duties formalities.

The Role of Mixed Commissions On Matters of Economic Cooperation

Due to the structure of long-term economic, industrial and scientific-technical agreements concluded by socialist countries with capitalist countries, particular tasks and responsibilities are vested in mixed commissions appointed by these agreements to develop economic cooperation. Generally these institutions supervize the fulfillment of agreement provisions.

The aims and assignments of mixed commissions are defined in the agreements themselves or in annexes to them. First, mixed commissions supervize the relation of agreements; second, they ensure the coordination of cooperation between the agreement parties and, third, their activity ought to promote the advancement and development of this cooperation. The means that the mixed commissions use to fulfill their assignments vary; they include analyses of cooperation development, investigation of programs and propositions for the promotion and development of cooperation, recommendations to government organs concerning means needed to realize particular agreements, and information exchange on essential courses of economic development of parties to the agreement. Mixed commissions also constitute an important forum for representatives of the planning organs of the contracting parties. Such meetings instruct the parties about the aims and methods of planning and about the economic development of the interested states.

Representatives of both countries join the mixed commissions as chairman (as a rule a ranking minister or vice-minister), his deputy, secretary, members and, if need be, other experts. In certain agreements, for example, between Poland and the Benelux, a recommendation includes on the commission representatives of interested industries and economic organizations.

Mixed commissions may confer in annual ordinary and extraordinary sessions in both countries alternately at jointly established dates. During the sessions they review economic relations between partners, particuarly the realization of industrial cooperation, and they evaluate accomplishments. They exchange information about new directions preferred by both states and possibilities of cooperation.
The following long-term decisions of agreements are made: liberalization of turnovers included in cooperation understanding or the question of creating new facilities for industrial cooperation.

Therefore, the mixed commissions constitute the essential element in realizing economic cooperation of long-term intergovernmental agreements. Their activity and authority bear substantially on the intensification of this cooperation, attested to by experience.[9]

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[9] For more on the subject of mixed commissions, see E. Butkiewicz, K. Michalowska-Gorywoda, LONG-TERM PACTS ON ECONOMIC COOPERATION BETWEEN SOCIALIST COUNTRIES AND COUNTRIES OF WESTERN EUROPE. Warsaw 1976, pp 101-103. Compare also M. Rucinski, A. Wieczorkiewicz, "Long-Term Economic Understandings of Poland with Capitalist Countries." INTERNATIONAL AFFAIRS, 1975, No 12.

Mixed commissions have, in many cases, separated those branches and subsectors of industry in which cooperation is particularly advantageous for both sides and which were granted preference. The mixed commissions contributed considerably to forming new legal bases for economic cooperation between socialist countries and the highly developed capitalist countries, which establish long-term programs of economic, industrial and scientific-technical cooperation.

Long-Term Programs of Economic Cooperation

The basic aim of long-term programs for economic cooperation is realizing long-term pacts on economic cooperation and specializing the means for implementating tasks designated by these pacts. Long-term programs of cooperation, which have recommendations to enterprises, firms and economic organizations of both sides, designate in detail fields in which particularly profitable and long-lasting cooperation perspectives exist, and they enumerate specific enterprises that would serve these tasks.

The USSR-French program signed on 10 July 1973 in Moscow as the first in history of treaty relations between the countries of East and West, quotes five essential directions of cooperation between these countries: --cooperation in building large industrial installations in the USSR (for example, a Soviet truck factory on the Kama River) and in France (a metallurgical combine in Fos-sur-Mer),--supply by France of machinery, equipment and licenses for plants built in the USSR, these deliveries will be partially or totally paid by the USSR in goods produced in these plants;--coproduction for markets of both parties, as well as for markets of third countries;--cooperation to promote Soviet export to France in order to actuate and compensate the trade exchange;--increase of Soviet purchases on credit of complete French installations, technology and finished goods.

On the other hand, in the program signed in October 1975 by Poland and the FRG, the following fields of economic, industrial and technical cooperation are listed, above all: coal and energy, iron, steel and nonferrous metals industry, machinery and motorization industries, electronics, ship-building, chemical, building trade, agriculture and food industries. Cooperation of both sides is anticipated in the markets of third countries, as well. In relation to each preferred field of cooperation, long-term programs specify concrete cooperative enterprises, possibly undertaken by industries and economic institutions of both contracting parties. Long-term programs on economic cooperation between socialist and capitalist countries also include declarations by governments of the contracting parties of their support for intensification in the program fields. This is expressed in recommendations, that the governments address to the proper agents of cooperation to contracting in a short time suitable aggreements and understandings to implement the essence of the program.

The period for long-term programs developing economic cooperation is generally 10 years, as in the long-term cooperation agreements (for example, the program on the development of economic, industrial and scientific-technical cooperation between the USSR and Sweden, signed in April 1975). However, this period may sometimes be longer (for example, the program on the development and intensification of commercial-economic, industrial and scientific-technical cooperation between the USSR and Finland signed in May 1977 and operative until 1990).

The legal and institutional bases of East-West economic cooperation developed during a number of years and are a fundamental and flexible instrument of foreign economic policy. Its efficiency depends essentially on the political will of the contracting parties to fill in these agreements with practical activities.[10]

Between The Socialist Countries And Countries of EEC Specific Character of Treaty Relations

The markets of EEC member countries have a particularly important value for the socialist countries. Trade between these parties constitutes the main stream of turnover in East-West commerce. Some 80 percent of commodity turnover of socialist countries with Western Europe goes to EEC countries. Until 1975 commercial and economic relations between these countries were controlled by the bilateral intergovernmental agreements. However, the EEC Treaty of Rome obligated its members to a common trade policy toward third states after the transition period in the community (31 December 1969). With these decisions, the governments of individual EEC countries have lost the right of negotiating and concluding bilateral commercial agreements with third states. Their powers in this field were taken over by the community's commission operating on the basis of a mandate and instructions furnished by its Council of Ministers.

In relation to socialist countries, which have not recognized the EEC and have not agreed to negotiate with the commission, the date of introducing the Common Market procedure for commercial policy was somewhat delayed, because the last bilateral agreements ended in 1974. From 2 January 1975 bilateralism in mutual relations between a socialist country and an EEC country was replaced eventually by the Common Market procedure. Since socialist countries rejected negotiating Common Market commercial agreements with the EEC commission, on 1 January 1975, a period started of defacto nonagreement exchange between socialist countries and EEC countries, based only on autonomous decisions of community authorities. The deadlock in conceiving economic cooperation with the EEC countries has increased the existing uncertainty in mutual trade relations. This has influenced the recently increased activity of the socialist countries as well as the EEC governments to work out new legal and institutional bases of economic cooperation, bases that have not entered the range of EEC joint commercial policy. Not only socialist countries are interested in securing a harmonious development of mutual commercial and economic relations. On a certain scale, this possibility is, at least for now, created precisely by these long-term agreements on economic, industrial and scientific-technical cooperation. In this context one has to look at the intensification of ventures that emerged at the beginning of the 1970's in the field of contracting such agreements between socialist countries and EEC member states.

The further development and intensification of economic relations between both groups of countries, based on long-term agreements on economic, industrial and scientific-technical cooperation, will depend essentially on the development of EEC external commercial and economic policy.

The lack of precision in the Treaty of Rome on common commercial policy, particularly concerning its scope--as in relation to other problems of commercial policy--causes

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10. Compare M. Dobroczynski, "Directions of Politics in Economic East-West Relations." INTERNATIONAL AFFAIRS, 1978, No 3.

a basic divergence of attitudes on one side between EEC member states and on the other between the commission and community parliament, as to the degree and the character of mutual competence in concluding and implementing long-term bilateral pacts on economic cooperation. The Treaty of Rome also lacks any decision on agreements on economic cooperation. Although separate EEC member states were concluding similar bilateral agreements on economic collaboration and industrial cooperation with other third countries, only the long-term agreements with socialist countries created reservations and controversies at the EEC community organs. A situation for this particular interest of the EEC commission and parliament on economic cooperation was created by the interpellation of a member of the European parliament, the Belgian Glinne, he addressed the EEC Council of Ministers and the commission with the question if, by contracting a long-term agreement on economic cooperation (1972) with Poland, France had broken Common Market rules concerning compliance with the consultation procedure. Replying to this, the EEC commission stated that France acted in accordance with the binding rules by informing a posteriori other countries of the EEC community and commission about the conclusion of this understanding, this type of pact, is not covered by the consultation procedure established in 1961 and modified in 1969.

Nevertheless, the EEC commission, recognizing these understandings as an important instrument for stimulating commercial exchange between the countries of Eastern and Western Europe, has stated the aim of establishing proper forms of Common Market control. This is, in the commission's opinion, necessary to assure full efficiency of common commercial policy, which can be obtained only, when it also includes certain aspects of agreements in economic collaboration and industrial cooperation.

Simultaneously, the EEC commission, like the European parliament, constantly insists on attaching great importance to the development of industrial cooperation with socialist countries, because it sees a dynamic future form of cooperation, profitable for both sides.[11] In the commission's opinion, taking into consideration the interests of EEC member states, to establish and accomplish cooperative understandings with third countries, particularly the socialist and the so-called petroleum-rich, constitutes an important means for securing stable deliveries of raw materials, fuel and energy. However, first, cooperation with socialist countries will concern "large-scale projects requiring the cooperation of several European enterprises [Western-postcript by K.M.G.], industrial as well as commercial;" second, "the appearance of new and very dramatic competitors" (concerns the United States and Japan (postcript by K.M.G.),[12] third, the EEC project of creating an economic-and-currency union, community action in the field of long-term pacts on economic collaboration and industrial cooperation requires an unquestioning undertaking.

Initially the attitude of the EEC commission concerning bilateral agreements on economic cooperation was very strict. It postulated a complete takeover of these understandings, jointly with their negotiation on the level of the community,

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11. JOURNAL OFFICIEL, 1973 No C 67.

12. Document COM/73/1275, final of 3 October 1973. Compare also the so-called "Klepsch Report--European Parliament." Document from session 1974-1975--Doc. 425/74, 9 January 1975.

through uniform Common Market rules, as with commercial agreements. However, due to pressure exerted on the commission by member states, particularly France and the FRG, the commission revised its initial proposals, as reflected in a commission decision submitted to the Council of Ministers in October 1973, which constituted the first stage of a united action planned by the commission.[13] Recognizing the right of EEC member states to bilateral negotiation of understanding, the commission suggested obligatory consultation in negotiation stages, as well as measures undertaken by member states during the implementation of pacts on economic cooperation. Moreover, the EEC commission postulated the inclusion of a revision clause in these pacts, similar to the so-called EEC clause inserted in the commercial pacts, allowing the change of conditions when necessary because of further integration within the community.

The discussion of commission projects exposed essential differences among EEC member states regarding economic collaboration with socialist countries.[14] The so-called EEC minority, namely, small countries, generally declared themselves for the commission project. However, the governments of countries like France, the FRG or Italy, with a greater commitment to business transactions with the East, displayed a less than favorable attitude toward these proposals, considering them an attempt to limit their sovereignty and autonomy in economic contacts with socialist countries. After prolonged negotiations, a preliminary resolution concerning mutual information was adopted by the Council of Ministers on 25 June 1974, and a final decision was taken on 22 July 1974.[15] It obligates the member states to inform the commission and remaining states of the intention to start negotiations for a pact on economic cooperation with third countries (this, however, concerned mostly socialist countries), to transmit texts of the pact, and also to inform on the pacts' means and undertakings that may concern EEC activities, particularly its commercial policy. The consultation procedure, whose mode and terms have been precisely defined by these decisions, simplifies the mutual exchange of information and views on control from the point of view of agreement conformability, as well as actions of the mixed commissions, with the principles of common EEC commercial policy, and also on the coordination of means within the community, relating to the importation of goods subject to cooperation agreements. On the other hand, concerning the commission postulates on including in the pacts the revision clause on economic cooperation, the Council of Ministers decision accepts the necessity of such a clause but leaves to the member states a free hand on its scope.

The decision of the EEC Council of Ministers regarding economic and industrial cooperation does not have any great practical importance; one must examine it

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13. JOURNAL OFFICIEL, 1973, No C 106.

14. More on this subject, see T. Kolodziej, "EEC and Industrial East-West Cooperation." INTERNATIONAL AFFAIRS, 1975, No 7-8.

15. JOURNAL OFFICIEL, 1974, No L 208.

primarily through the prism of program and propaganda effects. However, in the future, one must count with a serious limitation of management by EEC member states in concluding and implementing long-term agreements on economic, industrial and scientific-technical cooperation. It is important, since the question concerns the limitation of the independence of countries in matters that were not included in mutual economic EEC policy by the Treaty of Rome.

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CSO: 2600/298

PAPER SHORTAGE IN PRINTING INDUSTRY DISRUPTS ECONOMIC ACTIVITIES

Warsaw POLIGRAFIKA in Polish No 4, Apr 81 p 73

[Text] The drastic limitation this year in paper allotments for printing plants (with the exception of book production) has resulted from (1) the lack of foreign exchange to purchase cellulose and (2) the shortening of work time in the paper mills. Particular difficulties are presently being experienced in printing plants designated for the printing of job-work, printing for mass use and packaging. It is not possible to transpose those printing plants from day to day to publishing production. This would require the exchange of machinery, which in the present situation is impossible as a result of a lack of foreign-exchange funds for the eventual purchase of machinery.

The government's decision to allot an additional 12,000 tons of paper for the needs of the book publishing houses at the expense of the printing of job-work and packaging has caused in effect, however, not only perturbations in the printing industry. It threatens serious consequences for the supply of indispensable print for an enromous number of businesses in the country.

It is a matter of great concern during this difficult supply situation for paper to conserve the expensive material to a maximal degree. Everyone agrees with this, understands and values it. There are many types of print, which in the current situation one can do without. Action shown on television gives many reasonable examples. We must learn to collect wastepaper and returnable packaging (and there is a lot of this paper). In some countries, over 50 percent of the paper supply comes from recycled wastepaper.

The drastic cut limiting the printing of job-work and packaging may cause within several months or even weeks the complete paralysis of activity among such institutions as banks, insurance societies or others like public utilities. They cannot function without print. It is already happening that some businesses, citing a lack of necessary blank forms, are purchasing several reams of paper in the stores in order to make copies at the xerographic printers of the forms necessary for normal activity.

Everyone must limit his or her needs during the situation existing at present. However, if the global limitation reaches let's say 25 percent of hitherto existing allotments, there is a chance of somehow making our way out of this. Formats can be reduced and some printing can be stopped for a while in production (certain reserves exist). Maybe even a 30 percent reduction in allotments for this assortment of printing could possibly get us out of these difficulties. But if allotments for some users are cut by 70 percent or more, the situation may be catastrophic. For example, is it possible not to do payroll in some plant or institution because of a lack of blank forms? Is it possible to function for the time being without cashier receipts? Examples could multiply. At the same time, the serious increase this year of publishing production and the earmarking for this purpose of additional amounts of paper will not see the desired result because the printing industry simply will not adapt. It would require additional capital investments.

Such is the necessity for a renewed analysis to be conducted as quickly as possible of the government's decision from December of last year with respect to the proportion of paper distribution for book publishing and printing for mass use. An increase in the production of books is necessary, and public pressure in this regard is justifiable. However, moderation must be maintained so as not to cause the complete disorganization of economic life in hundreds or thousands of plants and institutions resulting from a lack of truly indispensable blank forms. Let's establish specific conservation tasks for everyone, but make them realistic!

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CSO: 2600/333

DIRECTIONS FOR DEVELOPMENT OF MARITIME ECONOMY OUTLINED

Disproportions in Development of Maritime Economy

Warsaw INWESTYCJE I BUDOWNICTWO in Polish No 4 Apr 81 pp 19-20

[Article by Tadeusz Lodykowski]

[Text] Disproportions or lack of harmony in the development of the maritime economy today occur in a few areas.

The most important area, and the reason for the existing gap, is the lack of internal harmony among the various elements of the maritime economy. These are fairly obvious matters, well-known among those dealing with that economy; e.g., disproportion between the growth of the merchant fleet and of seaport transshipment capabilities for certain types of cargo, disproportion within the deep-sea fishing branch, the fishing fleet and the state of land facilities, disproportion between the dry-dock facilities and the maintenance needs of the merchant and fishing fleets. These are some of the most often mentioned disproportions.

We do not very often emphasize the other areas of the disproportions, such as the gap between what the maritime economy could contribute to the national economy and what it does. If we are talking about the further development of the maritime economy, we must especially analyze this aspect. There still is the problem of unused potential of this using the sea for broadly understood economic purposes. The potential of this economy is not always fully perceived by the decision-making centers, or by the decision makers, who act under the pressure of current investment processes and basically forget strategic aims, which should be extracting the maximum benefits from the maritime economy for the national economy.

The third area is the disproportion between the current needs of the maritime economy and the ability to satisfy them. Again, unless this problem is solved, it is hard to talk about maximum or optimal use of the maritime economic potential.

This lack of proportion among the growth of individual components means that we cannot obtain the potential from the development of a given branch. For instance, if a detail necessary to develop the technology of transportation is containerization, then to produce the expected effects, technology must be so developed that the progress of each of its elements corresponds to the progress of other elements. The weakest and the least developed link determines the effects of the total.

As practically all the elements of the maritime economy are directly connected with the international market, it is necessary to mention one more area of disproportion, the disproportions between the level of quality of merchant fleet, ports, shipbuilding and fishing industries in highly developed countries and in Poland. In view of the keen competition usually dominating the international market, the elimination of this disproportion is especially important.

A final area of disproportion is the lack of harmony between the development of the maritime economy as a whole or of its individual branches and the development of other branches of the national economy related directly or indirectly to the maritime economy and its individual elements. This includes the shipbuilding and metallurgical industries, deep-sea fishing, the food industry, etc.

Despite the editor's request not to concentrate this article exclusively on investment requirements, we cannot totally disregard them. If we want to bring harmony to the development of maritime economy, if we want to use its potential to the maximum and if we want to achieve the proper level of satisfying our needs, we cannot do so without determining the investment tasks. The most essential thing for the maritime economy at this moment is to use most effectively--and cost-effectively--investment resources that are less than the needs.

The most urgent task is to list the investment requirements and determine the priorities and the investment stages in order to shorten as much as possible the time needed to achieve maximum results. Ongoing investments were meant to help the harmonious development of the maritime economy. First, investments that have been started should be completed. For instance, the container facility in Gdynia is an urgent task since it will determine the effectiveness of the fleet, the port and the movement of general cargo. There are several other previously decided investment tasks; e.g. the grain-fodder facility and the already started ore facility at the North Harbor.

One problem that must be attended to, is to select the source of ships to be purchased by Polish shipowners. This is also the problem of maintaining the proper proportion in the shipbuilding industry between production for export and for domestic customers. It would be highly desirable if the Polish shipbuilding industry could maintain and reinforce its position in the world market but it would be even better if, at the same time, its production could satisfy the basic needs of domestic customers. It is an unnatural situation, not found anywhere else in the world, not with that at this time not one freighter is being built for domestic shipowners.

To maintain the position of the Polish shipowner in the international maritime transport system, until now an important position and significant for our balance of payments, deliveries to domestic shipowners from Polish shipyards must be increased. These desires collide with the facts, with the established priority of orders. If we really plan to allot a share of this production to Polish customers, we must aim at a period when this is possible; i.e., after 1983.

Even greater attention must be directed to the development, or rather regression, of the cruise fleet. During the last few years, maritime tourism saw a lack of coordinated efforts. The Polish Baltic Shipping Company in Kolobrzeg had problems with the profitability of the ferry transport service. The Polish Ocean Lines are considering the successor to the Batory. The Gdansk Shipping Company and the

Szczecin Shipping Company are functioning and they are also planning the development of maritime tourism. The Gdansk Shipping Company is planning to build a passenger ship for the North and Mediterranean Seas. Each shipowner has his plans and ambitions. There is a need to coordinate the efforts, plans and projects. Who should do it? the ministry? regional organizations of the planning commission? Maritime tourism's future is dim if it continues to be handled as it has been.

Measures for Developing Maritime Economy

Warsaw INWESTYCJE i BUDOWNICTWO in Polish Apr 81 No 4 pp 20-22

[Article by Roman Lawnicki]

[Text] The choice of direction for investments in the maritime economy is related not only to the effectiveness of individual ventures in individual branches of this economy but also to a systematic analysis of the operation of the whole maritime sector in relation to the national economy and the future international connections of Polish maritime commerce.

An editorial discussion confirmed the need to distinguish two phases of investment programing:

--the preparation of basic assumptions and directions for investments in the years 1981-1985; i.e., during the period of limited domestic investments; this period must be characterized by the elimination of bottlenecks in the maritime economy;

--the determination of long-range investment direction until 1990, and even beyond, depending on the type and size of the undertakings.

This article deals with the basic investment assumptions and directions in the coming years under conditions of decreased investment funds.

The needs for investing in the maritime economy are determined by:

--the technological progress of world shipping, which at this stage requires certain investments to create a container system and to modernize the liner fleet,

--the necessity of eliminating losses, most of which are excessive foreign exchange expenditures caused by delays of harbor modernization and the "import" policy for overhaul of the domestic fleet and container equipment; I fully agree with Prof Lodykowski's article about the disproportions in the maritime economy and its weakest links;

--the possibility of obtaining better payoffs from development efforts in the maritime economy than from efforts aimed at comparable results in other fields. For instance, there are no indications that in the near future the relative cost of fish and animal protein will change; this of course, makes investment in the area of deep-sea fishing profitable despite the difficult legal and political situation of world fishing.[1]

--the purchase of equipment and tools essential for achieving higher mechanization of labor, especially in the shipbuilding industry, where the level of productivity, technological progress and equipment do not meet world standards;

--the revised level of continuing investments in ports and shipyards previously decided as highly important to the national economy;

--the delayed development of elements of the seashore settlement system directly connected with the maritime economy and whose transportation problems in the Gdansk metropolitain region and the Szczecin conurbation impact the ties of the ports with their inland supporting facitilies.

In the discussion, the first priority was given to containerization of sea transport. The concentration of investment activities on the construction of the container facility in Gdynia until 1983 should be the highest priority of the maritime economy; also, it is necessary to accelerate the companion tasks necessary for efficient operation of the container terminal. Primarily, the container overhaul plant should be an integral part of the container center in Gdynia. Having this plant operational will mean the elimination of foreign exchange expenditures, which in the first six months of 1980 amounted to almost $1 million (the expenditures of Polish Ocean Lines). The solution need not involve construction of a new plan; the problem could be solved by adapting an unused, existing industrial facility.

The second group of undertakings tied to the food industry would include the investments related to the fish-processing industry:

--modernization of the ice-making plant for increased production;

--an increase of frozen and chilled storage floor area;

--the production of transportation for frozen fish;

--modernization of production flowlines in coastal fish-processing plants.

The fishing sector of maritime economy is a component of the national food program (per capita consumption is about 7.5 kg annually); the arrears in the modernization of inland facilities should be made up as soon as possible in order to use the catch more rationally.

The nation's economic difficulties in the past few months and the resulting slowdown of work in the seaports gave rise to voices claiming that further investments in the ports are pointless. The error of such opinions is obvious, they do not consider future trends of the economy and the removal of barriers to Polish foreign trade thanks to more effective transactional motivation. Undoubtedly, the forecasting of maritime foreign trade volume is a most difficult activity; presumably, in the second half of the '80's, the trend of coal export and iron ore import will continue at the level of the '70's and the import and export of other bulk goods--i.e., mostly raw material for the chemical industry--will increase. In view of this, the specialized facilities currently under construction for transshipment of coal and ore should be completed.

In the Polish seaports no specialized grain and fodder transshipment facilities are equipped with modern transshipment technologies or deep draft docks for mooring large grain bulk carriers of 60,000 to 70,000 in dead weight. For a dozen years, the problem of constructing a modern grain-fodder terminal in the Gdynia harbor was under discussion. The so-called transshipment facilities operating in the ports of Gdansk, Gdynia and Azczecin permit the annual output of 3 million tons of grain and fodder imported aboard small and medium-size ships. What caused the delay in constructing a grain-fodder terminal and what is the basis of delay now?

First, the planners' expectations regarding Poland's self-sufficiency in grains and fodder have not materialized. This self-sufficiency theory constituted the main reason for the negative decision on the undertaking under discussion. In fact, the imports of grain and fodder systematically increased during the postwar period; in the years 1978-1980 they reached the level of about 8 million tons annually. Our agriculture fully covers the consumer and grain industry needs; despite this we should anticipate that importing grain and fodder will be a permanent element of our trade because of the profitability of animal breeding based on this import and the export of meat.

Polish agriculture enters into the animal-breeding economy with a clear program for further development. Having a port grain-fodder terminal means that:

--the time needed to transship grain and fodder will be shortened (the average daily rate of transshipment in a reputable West European port is about 29,000 tons while in a Polish port it is about 4,500 tons of grain); specialists calculated that, for example, in 1979 transportation of grain and fodder from United States and Canada cost us about $30-35 million more because it takes longer to unload in Polish ports;

--the annual cost of so-called off-lighterage on the order of $10 million can be eliminated;[2]

--the costs of prolonged loading of railroad cars, of inadequate silo storage capacity and of the lack of specialized equipment to load barges can be limited.

Without a port grain and fodder terminal, the national economy loses about $50 million dollars. With the outlays necessary to build a terminal, the costs of construction could be amortized within 3 years.

The conclusions based on the preceding discussion constitute the synthesis of this article:

1) recognition that some ongoing and some new investments are essential, that they would eliminate bottlenecks in the system, prevent "impotence" in the face of difficulties and losses and prevent the failure to derive full benefits that the maritime economy can deliver,

2) allocation to maritime enterprises of a portion of foreign exchange profits earned by these enterprises for the purpose of financing their own modernization investments.

FOOTNOTES

1. In the 1970's, certain limitations of the freedom to fish appeared as the result of:

   --protection of some species for biological reasons and introduction of so-called fishing allotments by the international fishing conventions;

   --coastal states declaring their ownership of living sea resources and establishing maritime economic spheres (generally 200 miles).

2. In the Polish ports there are no facilities to unload ships carrying grain and fodder and having draft over 31 feet; i.e., for ships greater than 25,000 tons in dead weight.

The cost of transporting 1 ton of grain from the United States to Europe by a bulk carrier of 60,000 to 70,000 tons dead weight is about $30 less than by a ship of 12,000 tons dead weight. Thus, when the grain is brought by large bulk carriers, a partial unloading of grain into smaller ships takes place within our ports; this causes additional cost of the so-called off-lighterage.

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FISHING FLEET 1981-1985 PLAN PUBLISHED

Warsaw BUDOWNICTWO OKRETOWE in Polish No 1, Jan 81 pp 22-26

[Article by Boguslaw Piskorski, Master Engineer: "Polish Fishing Fleet During the Five-Year Plan 1981-1985"]

Features of the Fleet Owned

Deep-sea fishing fleet

[Text] The fishing fleet regulated by fishing enterprises which are under the control of the Fishing Industry Association is composed of three large groups: the deep-sea fishing fleet, the auxiliary fleet and the fishing cutter fleet operating in the Baltic.

The first of these had 116 ships at its disposal at the end of 1979, the second was made up of 9 and the third has as many as 226 ships. The type of ships, their age and that of the enterprises are shown in Tables 1 and 2.

The largest deep-sea fishing enterprise from the standpoint of fleet size is PPDiUR "Odra" ["Odra" State Maritime and Fishing Facilities Enterprise] in Swinoujscie which has 49 trawlers at its disposal. In second place is PPDiUR "Dalmor" in Gdynia. It operates 40 trawlers. The PPDiUR "Gryf" in Szezecin has a fishing flotilla composed of 27 ships.

However, there is a complete difference in the age and therefore, the quality of ships standing at the disposal of the particular maritime shipowners.

The youngest fleet is at the disposal of "Gryf." The average age of this enterprises' ships is 6.5 years.

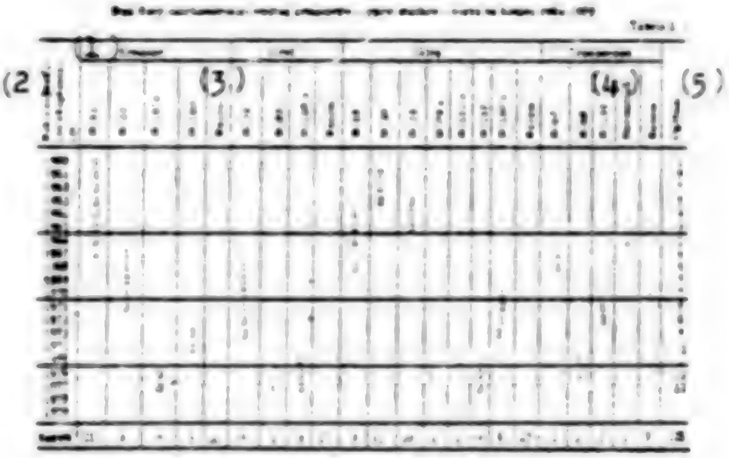
"Dalmor" operates a considerably older fleet. The average age of its ships is approaching 11 years. The oldest are the B-15 type ships whose average age reaches 15 years. In this group, a real "old-timer" is the trawler "DALMOR" GDY-300 which is beginning its 22nd year of operation. B-22 type ships have on the average surpassed 9.5 years of life. B-419 and B-414 type ships belong to the youngest.

The oldest and most operated fleet is at the disposal of "Odra" in Swinoujscie whose ships are on the average nearing 12 years of age. This shipowner's B-20 type ships are beating a group record for age having already surpassed 17 years and are rapidly approaching the set limit for ship life of 20 years. Not much younger are the B-23 type trawlers having already exceeded 15 years of operation and the B-18's which are on the average 14 years old. The remaining ships belonging to "Odra" are young (B-418, B-414, B-89, and B-417). However, this young group of ships (4 years old) numbers barely 11 units together, therefore, less than one-fourth of the entire number in possession.

In the group of deep-sea fishing ships, the auxiliary fleet PPURM "Transocean" [expansion unknown] should also be discussed. From September 1980, it numbers a total of 10 ships. Their average age is seven years.

The average age of the entire deep-sea fishing fleet of all four of the above discussed enterprises is rapidly approaching 10 years. It may generally be said that this is not a bad situation, if it were not for the fact that the age of our fleet has been rapidly increasing for the last three years. This can be seen directly from Table 1. In the years 1978 and 1979, not even one ship was added to the fleet and in 1980 only a transport ship, TERRAL, was added. This is serious because without reinforcement of the fleet with new acquisitions, the average age of the entire fleet is increasing in proportion to the passing calendar years, thus, in the last three years our fleet has aged three years. It will become more and more difficult to rejuvenate the fleet.

Table 1. State of the deep-sea fishing fleet according to shipowners, ship types and age at the end of 1979



Key:

1. Shipowner
2. Year of starting operation
3. Total
4. Harmattan [ship type]
5. Total sum

Baltic Fleet

Let us continue on to the Baltic fishing cutter fleet (Table 2). The largest enterprise in this group, taking into account the size of the fishing cutter flotilla, is PPiUR [Fisheries and Fishing Facilities Enterprise] "Szkuner" in Wladyslawowo. At the end of 1979, it had at its disposal 52 fishing cutters of four types. Immediately after "Szkuner" is the shipowner from Ustka--PPiUR "Korab" with a flotilla numbering 50 ships also of four types. In third and fourth place are PPiUR

"Barka" and PPiUR "Kuter" owning 46 and 45 fishing cutters respectively. The least numerous fishing cutter fleet is owned by the shipowner from Hel--PPiUR "Koga." Under its banner, 35 fishing cutters put out to sea to fish.

Table 2. State of the fishing cutter fleet according to shipowners, ship types and age at end of 1979

Stan floty kutrowej według armatorów, typów statków i wieku na koniec roku 1979

Tabela 2

(1)	17 m				19 m		25 m						25 mA						TR-25		B-410						B-403			Ogółem (2)					
	Σ	Ba	Kb	Ku	Σ	Ku	Σ	Ba	Ko	Kb	Ku	Sz	Σ	Ba	Ko	Kb	Ku	Sz	Σ	Ko	Σ	Ba	Ko	Kb	Ku	Sz	Σ	Ba	Sz	Σ	Ba	Ko	Kb	Ku	Sz
1950	1		1																											1			1		
1951	1		1																											1			1		
1952	3		3																											3			3		
1953	2		2																											2			2		
1954																																			
1955	2		2																											2			2		
1956	2			2																										2				2	
1957	4	1	3																											4	1		3		
1958	20	9	2	9			3		2			1																		23	9	2	2	9	1
1959	3	2	1				10		2			8																		13	2	2	1		8
1960	4	1	2	1			8		3	2		3																		12	1	3	4	1	3
1961	2	2			2	2	5		4			1																		9	2	4		2	1
1962	1		1		2	2	6		1			5																		9		1	1	2	5
1963					2	2	7	1	1	1	1	3																		9	1	1	1	3	3
1964							7	2	1	2	1	1																		7	2	1	2	1	1
1965							6	1	2	2		1																		6	1	2	2		1
1966							5	2		2	1																			5	2		2	1	
1967							3			1	2								1	1										4		1	1	2	
1968							1				1																			1				1	
1969																																			
1970	2	2																												2	2				
1971	2	2					1		1				2			2														5	2	1	2		
1972													9	3		4		2												9	3		4		2
1973													17	4	2	4	4	3												17	4	2	4	4	3
1974													18	2	3	2	4	7												18	2	3	2	4	7
1975													11		4		6	1			2					2				13		4		6	3
1976																					14	2	3	4	3	2				14	2	3	4	3	2
1977																					4	1	1		1	1	3		3	7	1	1		1	4
1978																					7	5		2			3		3	10	5		2		3
1979																					10		2	4	3	1	8	4	4	18	4	2	4	3	5
(3) Razem	49	19	18	12	6	6	62	6	17	10	6	23	57	9	9	12	14	13	1	1	37	8	6	10	7	6	14	4	10	226	46	33	50	45	52

(4) Objaśnienie skrótów: Ba - Barka, Ko - Koga, Kb - Korab, Ku - Kuter, Sz - Szkuner. Σ - suma

Key:

1. Year of starting operation
2. Total sum
3. Total
4. Explanation of abbreviations: Ba = Barka, Ko = Koga, Kb = Korab, Ku = Kuter, Sz = Szkuner. Σ = Sum

When it comes to the average age of ships used for fishing in the Baltic, the youngest fishing cutter flotilla is that of PPiUR "Szkuner." The average age of ships belonging to this shipowner is nearing 11 years (the oldest unit in operation in operation dates back to 1958).

In second and third place are "Barka" and "Koga". Their ships are nearing the average age of 12. Ships belonging to PPiUR "Kuter" are even older and are already over 12 years old, therefore, in principle they have entered their second phase of life.

The oldest fishing cutter flotilla is owned by PPiUR "Korab". Its ships have already surpassed 14 years of age.

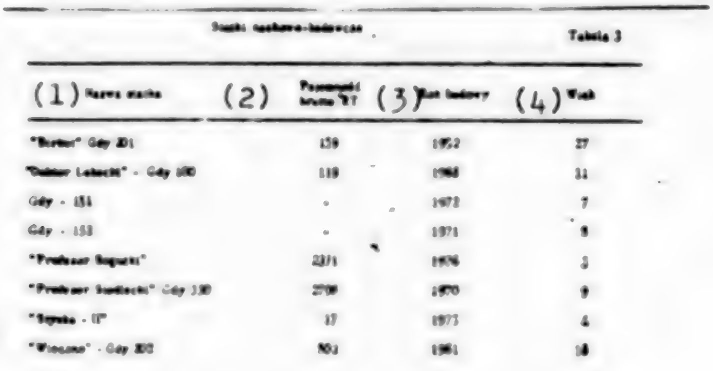
There are in principle seven cutter types operating in our state fishing cutter fleet. Forty-five 17-meter fishing cutters from the years 1950-1962 belong to the first group and four cutters of the same type from the 1971-1972 period. Their average age is 21 years! Six 19-meter fishing cutters built in the years 1961-1963 and averaging 17 years in age belong to the second group. The average age of these oldest fishing cutter groups treated jointly exceeds 20 years. The third and fourth group consists of fishing cutters of the B-25s and B-25sA type. Of the first type, we have a total of 62 from the years 1958-1971 with an average age of 17 years. Of the second type, we have a total of 57 from the years 1971-1975 with an average age of 6 years. The fifth group is represented by only one ship (TR-27) from 1967. The average age of these three groups of fishing cutters treated jointly (B-25s, B-25sA and TR7) amounts to over 11 years. The sixth and seventh group consists of the newest stern trawlers of the B-410 and B-403 type from 1975-1979. In total, we have 51 fishing cutters of both types.

The average age of our entire fishing cutter fleet at the end of 1979 surpassed 12 years. The cutter fleet is, therefore, 2 years older than the deep-sea fishing fleet but its prospects are better since it undergoes a continual rejuvenation process. Each year, it is systematically reinforced with new products from the shipyard, "Ustak and with B-410 and B-403 trawlers. Deliveries of these cutters in the last years were as follows: 1976--14, 1977--7, 1978--10, 1979--18, 1980--14 fishing cutters.

Science and Training

For a complete picture, the above description of the state and age of the marine fishing fleet should be supplemented with additional information about scientific-research ships which are under the ownership of the Maritime Fisheries Institute [MIR] and about ships under the control of fishing schools. This, MIR owns a total of eight ships (Table 3) of which at least two ships require urgent renovation.

Table 3. Scientific research ships



Statki naukowo-badawcze

Tabela 3

(1) Nazwa statku	(2) Pojemność brutto BRT	(3) Rok budowy	(4) Wiek
"[illegible]" Gdy [illegible]	139	1952	27
"[illegible]" - Gdy [illegible]	118	1968	11
Gdy - 151	-	1972	7
Gdy - 153	-	1971	8
"Profesor [illegible]"	2371	1976	3
"Profesor [illegible]" Gdy 130	2709	1970	9
"[illegible] - II"	17	1975	4
"[illegible]" - Gdy [illegible]	503	1961	18

Key:
1. Ship name
2. Tonnage carrying capacity, gross register tons
3. Year built
4. Age

On the other hand, two ships work directly for the needs of naval training (Table 4).

Marine fishing schools have very old ships at their disposal. It should be added, however, that for purposes of training new cadres, there are two, new ships under the direction of PPDiUR "Gryf" and PPDiUR "Odra", namely: ADMIRAL ARCISZEWSKI--Szn 19, type B-89 with a carrying tonnage capacity of 2620 RT [Register Tons] built in 1976, which went into operation in May 1977 as well as RYBAK MORSKI--Swi 228, type B-89 with a carrying capacity of 2599 RT built in 1975 and which began operating in July 1976.

Table 4. Fishing training ships

Statki szkolne rybołówstwa

Tabela 4

(1) Armator	(2) Nazwa statku	(3) Pojemność brutto RT	(4) Rok budowy	(5) Wiek lat
(6) Technikum i Zasadnicza Szkoła Rybołówstwa Morskiego, Darłowo	"Franek Zubrzycki" II	185	1953	26
(7) Zespół Szkół Rybołówstwa Morskiego, Świnoujście	"Emilia Gierczak" Świ 130	692	1957	22

Key:
1. Enterprise
2. Ship name
3. Tonnage capacity, Gross Register Tons
4. Year built
5. Age in years
6. Technical and Basic School of Marine Fishing, Darlowo
7. Consolidated Schools of Marine Fishing, Swinoujscie

Principal Tasks of Fishing Industry for the Period 1981-1985

Present state of Polish Fishery

Presently, our marine fishing supplies the market, export and non-consumer purposes is ensured by marine fishing hauls in the amount of approximately 800 thousand tons annually. From these raw materials, the fishing industry supplies 265,000 tons of finished products to the domestic market, exports 50,000 tons of consumer products and supplies 60,000 tons of fish meal and 20,000 tons of other products. Supplies of fish meal promote, in turn, an increase in the results of meat and poultry raising.

The demand for fish and other processed products is far from being satisfied. To obtain the set goal of 10 kg per resident would require at the present time an increase in supplies made to market of nearly 100,000 tons to the order of magnitude of 350-360,000 tons. An increase in supplies to 300,000 tons is an absolute necessity. However, to obtain this goal, it is essential that the fishing fleet be reinforced and renovated to the extent presented further on in the article.

Poland's participation in worldwide fishing in 1979 amounted to 1.1 percent and in 1980 it fell to about 0.94 percent. Of 800,000 tons fished only 25 percent comes from our own fishing zone in the Baltic. Further possibilities of developing fishing in the Baltic are exhausted since there exists a real danger of overfishing this biologically limited sea area. For this reason, maintenance of a certain level in Polish fishing hauls or their augmentation depends on the growth of deep-sea fishing which produces 75 percent of the fishing hauls of which a subsequent 75 percent comes from foreign economic areas. Therefore, the second condition for maintaining fishing on a high scale is the development of cooperation with coastal nations.

The combined tonnage of our deep-sea fishing fleet slightly exceeds 232,000 RT. The average age of this fleet is about 11 years--as presented above. This fleet is aging rapidly since it has not had additions of new ships since 1977. At the end of 1985, the average age of our fleet will reach 16 years and 35 percent of the number and 28 percent of the tonnage will require scrapping because it will have surpassed 20 years of operation. A subsequent 12 ships will require scrapping in 1987.

The fleet of refrigerated ships and motherships under the control of PPURM "Transocean" gives only a 50 percent assurance of transporting Polish fish products.

The situation is better in the fishing cutter fleet whose average age at the end of 1979 was 12 years but its process of rejuvenation with small B-410 type trawlers is being accomplished gradually giving real promise of maintaining this fleet's age on a rational level.

The costs of obtaining protein goods from fishing are 35 percent lower than protein from beef and pork meat. This proportion has held for the last dozen or so years. The foreign-exchange-intensiveness of the fishing industry, taking into account fuel costs, is lower than the foreign exchange of the meat industry with consideration given to the purchase of fodder.

Due to the nature of this article, discussion is not made of problems of the fishing industry not dealing with fleet matters, namely: land bases, processing plants, cadres, fish commerce, transport, etc.

Fundamental Problems of the Fishing Industry in 1981-1985

The major problem of the fishing industry in the upcoming 5-year period is the restitution of the fishing potential intended for scrapping. The decline in the fishing potential at the end of 1985 will as a result of the necessity to scrap 42 trawlers, amount to 130,000 tons of annual fishing hauls. The decline in the potential of the fishing cutter fleet is estimated at 39,000 tons of fish, thus, altogether the amounts fished are decreasing by about 170,000 tons.

A decline in fishing would create a series of negative consequences for the national trade and economy. It would indicate the following:

- a decline in final output by about 65,000 tons,

- a decline in fish meal production by about 13,000 tons which denotes a reduction in supplies of animal meat by 7-8,000 tons.

As a result of a decline in the fishing potential, deep-sea fishing felets from other nations would undoubtedly take over the fisheries abandoned by Poland and in addition, mainly in Szczecin, Swinoujscie and Gdynia, a glut in the working forces numbering in the tens of thousands would be created and the loss of qualified workers would be irreversible.

Ships which the industry intends for scrapping after a 20-year operating period (for some of them a 24-year period of operation has been established) must succumb to it for three fundamental reasons:

- with consideration for the safety of navigating, ships with reduced functioning dependability cannot be operated for long distances from home; e.g., fishing in the Antarctic or the Pacific and according to a 2-year system of operation without coming home. Thus, even if the navigability of these ships could be maintained at great costs, the possibilities of operating them will be very limited.

- lack of repair capacities in the country's shipyards. A sum of 2 billion zlotys i.e. 400 million zlotys annually ought to be allocated for repairs on B-15 and B-18 series ships. In the meantime, the current level of the fishing industry's needs is 70 percent taken care of by repair shipyards rendering services to the order of 600 million zlotys. The maintenance of technical readiness of 30 ships (25 percent of the state of the fleet) by appropriating for this purpose 60 percent of a shipyard's offered repair capacity is unacceptable because this would cause a significant decline in the fishing capacity of the remaining fleet. Providing for all of the needs would require expansion of the shipyard which is an expensive and lengthy process.

- for certain ship types (e.g., series B-23) there is at present a lack of appropriate fishing areas. These ships were built for operation in nearby fisheries and therefore, their processing abilities and holds are too small.

As a result, there is no technical alternative for maintaining the level of Polish fishing hauls without building a new fleet.

From the conducted economic calculations, it appears that in general, replacing the old fleet would in a matter of 5 years reduce operating costs by 3.5 billion zlotys (which constitutes about 40 percent of the capital investments for building). It should be stressed that approximately 2.5 billion zlotys from this savings will concern the direct foreign-exchange expenses for the operation of ships and for fuel purchases.

A parallel effect is the lessening of pressure on the potential of repair yards by 1.6 billion zlotys during the five-year plan (320 billion zlotys annually). This nearly equals the amount of the currently unprovided needs of the shipyards' repair branches.

Program of Development for the Branch in the Years 1981-1985

Taking into account a realistic evaluation of the fishing branch's potential and the sensible savings of investment means, combined with their maximum effectiveness, the program of development for the maritime fishing industry up to the year 1985 concludes with the following directional dimensions:

- attainment of 900-950,000 tons in fishing; of this amount 200,000 tons from the Baltic and 700-750,000 tons from deep-sea fishing.

- attainment of 300,000 tons supplied to the market with 275,000 tons of this amount in fish and fish products of marine origin with a concurrent improvement in the system of supplies (increase in the supply of fillets, smoked fish, marinades and delicatessen),

- maintaining of fish meal supplies in the range of from 50-60,000 tons as well as 3-4,000 tons of cod-liver oil and other oils.

The accomplishment of such a plan would enable to strengthen the role of Polish fishing in the world and would restrain Poland's participation in worldwide fishing constituting at the same time, an increase in fishing proportional to the growth of the Polish population.

In order to achieve the above presented assumptions, it is necessary:

a) to replace 41 ships of the deep-sea fishing fleet which is approaching 20-25 years in age with 45 new ships making possible, among other things:

- to carry out fishing with gathering devices in unclaimed areas (jiggers, tuna boats),

- a relative decrease in fuel intensiveness of the deep-sea fishing fleet and its total operating costs.

b) to build 12 ships for the auxiliary fleet which will help avoid foreign-currency expenses for transports by means of foreign fleet which, by way of example, amounted to almost $9 million in 1979.

c) to carry into effect the "Baltic plan" within bounds of a complex concept of development of the Polish fishing zone in the Baltic. This plan encompasses the replacement of the scrapped cutter fleet as well as many investments involved in providing for a direct land base.

Characteristics and Magnitude of Tonnage Necessary to Carry Out Tasks

On the basis of research conducted by the Maritime Fisheries Institute [MIR], the Fishing Industry Association described nearly 2 years ago, the foreseen need for fishing tonnage in the upcoming five-year period of 1981-1985 (Table 5). Moreover, the fundamental features and requirements concerning the ship types were defined. They are as follows:

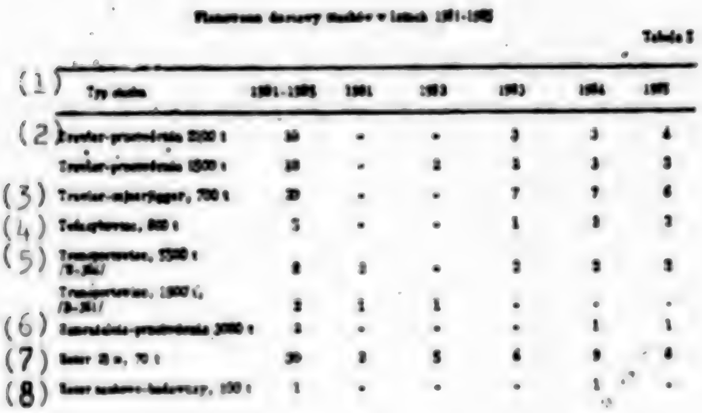


Table 5. Planned ship additions in 1981-1985

Key:
1. Ship type
2. Factory trawler
3. Seine-jigger trawler
4. Tuna boat
5. Transportship
6. Freezer-factory ship
7. Fishing cutter
8. Scientific-research cutter

Factory Trawler 2100 t

Ocean trawler for stern fishing and processing of fish on the Atlantic, Pacific or Indian Ocean within the range of acquired limits and partnerships; or fishing on ocean inclines and shallows. A trawler should have the ability to produce fillets, stuffing, halved fish carcasses [tusz], fish meal and oil as well as pure krill meat by shelling, low-chitin fodder meal and the raw materials for the production of chitin (frozen carapece).

The ship should possess:

- the ability to fish with two and three troll-nets alternately as well as with two troll-nets parallel,

- a production plant for fish meal with an output of 100 tons of raw material per day,

- a processing plant adapted for the quick conversion of processing machines suited to the fishing area by the application of adjusted assembly hatches and universal foundations,

- freezing capacity of 60 tons/day,

- three holds (for frozen products, for frozen products and fish meal, for fish meal),

- fuel capacity for 70 days,

- stocking capacity of 150 days,

- average fishing capacity of 20-30 tons/day,

- average carapece haul capacity of 85 tons/day.

It is estimated that the demand for them will be 10 units from 1981-1985 and 6 units from 1986-1990.

In general, this ship is viewed as a suitable mutation of a B-407 type ship with more substantial changes in the processing and production of fish meal which will be described following tests on the first ship of this type to be built in 1981.

Factory Trawler 1500 t

The general features of the ship are like those of the above described factory trawler 2100 t with the following differences:

- the production of fish meal with an output of 75 tons of raw material/day,

- freezing capacity of 50 tons/day,

- fuel endurance of 60 days,

- stocking endurance of 120 days.

Demand: 1981-1985--10 units and 14 units between 1986-1990.

The ship's construction may be based on one of the existing trawler hulls; however, it should have a bulbous bow and be adapted to ice fishing and in terms of power.

Ship Averaging 700 tons

Ship intended for stern fishing by means of a trawler system in shelf waters which are within the limits of agreements and cooperative partnerships in the Atlantic, Pacific and Indian Ocean as well as for squid fishing in ocean waters outside of claimed zones.

The following, approximate, principal parameters of the ship are foreseen:

- length 60 m
- volume 700 m^3
- power S.G. [expansion unknown] 2,000 HP
- speed 13 knots
- crew 35 persons

The ship should have a stern deck structure for trawler fishing and about 30 hook-type squid hoists operated automatically for squid fishing and:

- plate freezers with a capacity of 30 tons/day,
- fish meal production block with an output of about 12-25 tons of raw material per day,
- capacity for the easy exchange of processing machines
- fuel capacity (fish) 40 days
- fuel capacity (squid) 60 days
- stocking capacity 120 days

Demand: 1981-1985--20 units and 22 units between 1986-1990.

A certain number of ships of this series should also be adapted for the use of a purse seine.

Tuna Boat 800 t

Ship for tuna fishing, for operation in tropical areas of the Atlantic, Pacific and Indian Ocean mainly outside of claimed zones. The eventual construction of tuna seines is being considered.

A more precise description of the ship type, its intended purpose and parameters constitutes the subject for a separate analysis.

It is estimated that in 1981-1985 the need for this type of ship will be 5 units and in 1986-1990--10 units.

Transport-Freezer Ship, 5500 t, B-364

Motor-driven transport ship adapted for the transport in its refrigerated holds of: frozen fish and fish products in cartons, salted fish in barrels, fish meal, cod-liver oil in tank containers, provisions, containers and fuel for fishing ships. Trans-loading at sea and from fishing ships will be handled by the ship's own cargo handling crew. The ship's principal parameters are:

- navigational range	12-14,000 nautical miles
- maximum length	140 m
- region of navigation	unlimited
- volume of ship's hold	8,200 m^3
- speed	18 knots
- number of crew	60 persons

Demand: 1981-1985--eight units and two units in 1986-1990.

Transport-Freezer Ship, 1900 t, B-361

Motor-driven transport ship intended mainly for the purpose of receiving frozen fish and fish products at sea and transporting this cargo to destined ports in refrigerated holds at -28°C and fish meal refrigerated at +15°C. In addition, the ship will be used to supply provisions and packaging containers to fishing ships and to transport frozen and cooled commercial cargo (citrus fruits),

- navigational range	7,000 nautical miles
- area of activity	unlimited
- volume of ship's hold	1,200 m^3
- speed	15.5 knots
- crew	27 persons

Demand: 1981-1985--three units and two units in the years 1886-1990.

Ship for Fish Pick-Up at Sea 3000 t

Specialistic ship for receiving and processing fish at sea and for preserving and transporting them. The hold's volume should ensure a storage capacity of about 1,000 tons of fish in cartons while the processing plant should have the capacity of processing about 200 tons of raw products per day for fillets and halved fish !tuszki!.

It is estimated that the demand for this type of ship will be two units each in 1981-1985 as well as in 1986-1990.

25-meter, Baltic Stern Trawlers

Trawler, 25 meters in length, modernized and improved according to suggestions discussed during meetings in the shipyard "Ustka" in 1979. The demand for it will be 30 units in the 1981-1985 period and 20 units in 1986-1990.

Scientific-Research Cutter

Ship approximately 30-35 m in length intended for scientific research in the Baltic dealing with oceanography-ichthyology as well as fishing techniques and technology. It is predicted that one ship will be operated in the 1981-1990 period.

The one true supplier of the above featured ships or those of a similar type are the Polish shipyards. They are technologically capable of building all the types of units needed by our maritime fishing. It is only a matter of properly channeling their tasks so that our national needs are fulfilled in first order.

The matter of training ships whose stately [matuzalemowy] are given here in the beginning must inspire concern, requires a separate solution. An attempt at organizing all the training on modern trawlers, type B-89 "RYBAK MORSKI" and "ADMIRAL ARCISZEWSKI" turns out to be impossible. The students of the Naval College and the Agricultural Academy in Szczecin as well as the students of the Sea Fishery Technical School in Kolobrzeg fill nearly to an excess the training capacities of these ships, thus, creating the necessity in the next few years of securing suitable training ships for the Technical and Basic Sea Fishery School in Darlowo and for the Complex of Sea Fishery Schools in Swinoujscie. Such ships could surely be also built by our shipyards; we need only to quickly begin crystallizing our proposals and then begin developing the project.

There are, however, serious obstacles on the way to the realization of this plan: Will the shipyards receive the task of building training-ships; will new, indispensable means be found? It should be remembered that these means represent a need of about 20 billion zlotys for the realization of the entire maritime plan of the fishing industry. Although, this is not a small sum, it must be spent if we wish to maintain a vital level of fish consumption in Poland which represents a substantial and relatively inexpensive supplement to the serious protein deficiency in our country.

Fishing Fleet Repairs

In shedding light on the matters of the Polish maritime fishing fleet and the needs of our fishing industry in terms of renewing the tonnage in the next few years, the problem of ship repairs and the needs existing in this area cannot be omitted.

Baltic Fleet

Our fishing fleet is repaired in part in its own repair shops called the Shipowners Repair Centers [AOR] as well as in shipyards belonging to the Association of Maritime Repair Yards.

The AOR's existing alongside all of the five Baltic fishing enterprises perform in essence all of the required repairs on all the fishing cutters availing themselves in part of the assistance of larger repair centers located in certain fishing cutter enterprises when it comes to 4-year repairs and in particular use the assistance of the Fishing Repair Yard which is a strong AOR of the enterprise "Szkuner" in Wladyslawowo. As a result of the introduction into operation, in the last few years, of new but heavy B-410 type trawlers built in the "Ustka" Shipyard, problems arose during repairs of these ships because of a break-down in the underwater parts of the hoisting equipment. To overcome these difficulties, modernizing work is being conducted on the slip of "Szkuner" and "Barka" and the construction of a vertical hoist in "Kuter" is being undertaken but for the time being and to a limited degree, fishing cutter enterprises are forced to avail themselves of the assistance of the maritime repair yards which have the proper capacities at their disposal.

Deep-Sea Fishing Fleet

In the area of the deep-sea fishing fleet, the AOR's of three of our large, deep-sea fishing enterprises; i.e., "Dalmor", "Gryf" and "Odra" perform a wide range of inter-voyage and annual repairs; on the other hand, major ship repairs are handled in the maritime repair yards of Gdansk, Gdynia, Szczecin and Swinoujscie.

Our fishing industry also has at its disposal a service-transport fleet made up of 10 ships which are centralized in the hands of the specialistic shipowner PPURM "Transocean." This shipowner does not have its own AOR and is forced to refer all repairs to the repair yards.

For a complete picture, it should be added that a certain number of repairs--mainly preventive in nature and due to damage--is carried out abroad by fishing shipowners. This is necessary in certain situations because of a long, as much as 2-year cycle in operation and also because of the great distance from home. However, these repairs are carried out with the assistance of our own crews and specialists (sent out) from the country, most often in planes, to the most distant ports of the world and selected shipyards abroad employed to carry out essential heavy work and labor on the underwater parts of ships.

It should be stressed, however, that the greatest weight of fishing ship repairs rests on our repair yards which, unfortunately, have not been accepting or performing for years, the entire, necessary scope of repairs. The repair needs of the fishing industry are taken care of in 70 percent by shipyards of the ZMSR [Association of Maritime Repair Yards] and not only in terms of quantity but also--as is sometimes the cause for very serious perturbation--in a technological sense. The shipyards simply are not accepting certain kinds of work; e.g., maintenance-painting, electrical, work related to the repair of very large electrical machinery, etc.

From the point of view of the fishing industry, the development and modernization of our ship repair enterprise in a short amount of time is simply essential. Otherwise, we will be forced to seek assistance abroad to an increasingly greater extent, spend valuable foreign-exchange currency instead of employing our own workers. Under-repaired ships navigating in very difficult sea areas will succumb to accelerated decapitalization, the technical readiness of a very expensive fishing fleet will decline which, consequently, will not be capable of fishing and supplying the country with the necessary amount of fish and fish products.

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POLAND

COMMUNIQUE ON BREAD-CEREAL PRICES PUBLISHED

Warsaw TRYBUNA LUDU in Polish 24 Aug 81 p 2

[Article: State Price Commission announcement relative to the increase in retail prices of bakery goods and grain-flour products]

[Text] The State Price Commission announces a change in the prices of bakery goods and grain-flour products, as well as a system of compensations with the purpose of making them effective 31 August 1981.

1. PRICE LIST

Bakery goods retail price list

1. Item	2. Assortment	3. Weight	4. Current official price in zlotys per unit	5. Proposed retail price in zlotys per unit
		I. Basic bakery goods		
1.	Whole-meal bread	1.0	--	18.00
2.	Rye bread	0.5	4.00	9.50
		0.8	6.00	15.00
		1.0	8.00	19.00
		1.6	11.00	29.00
3.	Graham bread	1.0	4.00	20.00
4.	Graham roll	0.05	0.70	1.50
		0.10	1.30	2.80
5.	Common bread	0.5	--	10.50
		0.8	6.70	16.00
		1.5	--	29.00
6.	Common bread on doily	0.5	--	11.00
		0.8	--	16.50
		1.5	--	30.00
7.	Milk bread	0.5	--	11.00
		0.8	6.00	17.00
		1.5	--	30.00

8.	Zakopane bread	0.5	3.30	12.00
9.	Wheat bread	0.7	6.50	16.00
		1.5	13.00	30.00
10.	Lecithin bread	0.5	7.00	15.00
11.	French baquettes	0.40	8.00	13.00
		0.25	6.00	9.00
12.	Bread rolls			
	- wheat roll	0.05	0.70	1.50
		0.10	--	2.80
	- Poznan	0.05	0.80	1.50
		0.10	--	2.80
	- Kielce rolls	0.50	5.00	12.00
	- hot dogs	0.20	2.60	5.50
	- baton	0.20	2.60	5.50
	- kaisar rolls	0.05	1.00	1.60
		0.10	1.90	3.00
	- caraway rolls	0.05	1.00	1.90
		0.10	1.90	3.30
	- salted rolls	0.05	1.10	1.90
		0.10	2.00	3.30
	- cracknel	0.10	2.10	3.30
		0.20	4.00	6.20
	- Malgorzatki	0.20	3.90	6.00
	- Crescents	0.05	1.10	1.90
		0.10	2.00	3.50
	- choice rolls	0.40	3.20	12.00
13.	Buttered rolls and crescents			
	- wheat roll	0.05	1.10	2.00
		0.10	2.10	3.80
		0.20	--	7.40
	- crescents	0.05	1.20	2.20
		0.10	2.20	4.00
		0.20	--	7.70
14.	Plaited, decorated breads	0.20	6.40	9.00
		0.50	6.50	19.00
		1.00	12.00	36.00

NOTE: The prices of semi-sweet rolls with various fillings (such as marmalade, poppy, cheese, etc.) are determined by producers in their own area.

II. Supplementary bakery goods

1. Item	2. Assortment	3. Weight (kg)	4. Current official price in zlotys per unit	5. Proposed retail price in zlotys per unit
15.	Whole grain rye bread	0.8	15.00	22.00

16.	Whole-meal honey bread	1.0	8.80	21.00
17.	"Pumpernickel" bread	0.25	4.00	9.00
		0.05	7.20	15.50
18.	Tourist bread	0.50	2.20	11.50
19.	Bran bread	1.0	10.00	22.00
20.	Beskid bread	0.5	4.00	11.00
		1.0	8.00	21.00
21.	Malt bread	1.0	7.00	23.00
22.	Old Polish Bread	1.0	7.00	20.00
23.	Warsaw bread	0.8	6.00	20.00
24.	Turkish bread	0.20	7.40	10.50

III. Dietetic bakery goods

1. Item	2. Assortment	3. Weight (kg)	4. Current official price in zlotys per unit	5. Proposed retail price in zlotys per unit
25.	Low sodium dietetic mixed bread	0.5 1.0	4.00 8.00	10.50 20.00
26.	Low sodium dietetic wheat bakery goods			
	- Rolls	0.20	2.20	5.50
	- Bread	0.5	4.80	11.50
27.	High protein dietetic bread	0.5	10.00	16.50
28.	Starchy dietetic bread	0.5	9.00	40.00
29.	Gluten dietetic bread	0.40	9.00	30.00

IV. Regional and trademark bakery goods

1. Item	2. Assortment	3. Weight (kg)	4. Current official price in zlotys per unit	5. Proposed retail price in zlotys per unit
30.	Zabludow bread (Bialystok voivodship)	1.00	7.00	21.00
31.	Krzycki bread (Wroclaw voivodship)	0.8	6.00	15.00
32.	Wroclaw bread (Wroclaw voivodship)	1.0	12.00	27.00

33.	Toasted bakery products	0.52	10.00	18.00
		0.78	14.00	26.00
34.	Salty "Solinki" sticks	0.10	6.00	9.00
35.	Sweet sticks with poppy	0.10	6.00	10.00
36.	"Crissini" cakes	0.15	8.00	11.00
37.	Cocoa cakes	0.15	8.00	12.00
38.	Dessert cakes	0.15	8.00	12.50
39.	Crisp bakery goods	0.22	6.00	17.00
40.	Crisp bakery goods	0.25	--	18.00
41.	Crisp bakery goods "Milch"	0.25	8.00	20.00
42.	Crisp bakery goods "Roggen"	0.25	8.00	20.00

V. Bread crumbs

Bulk	1.00	10.00	38.00
Packaged	0.50	5.50	20.00

Retail price list of grain products

Item	Article	Type of packaging	Sale unit	Retail prices	
				Old	New
1	2	3	4	5	6

I. Wheat flours

1.	Tort type 450	Paper bag	1 kg	10. -	26. -
2.	Pure wheaten flour	Paper bag	1 kg	7.50	26. -
3.	Wroclaw type 500	Paper bag	1 kg	6.70	23. -
4.	Mazovian type 450	Paper bag	1 kg	10. -	25. -
5.	Poznan type 500	Paper bag	1 kg	10. -	24. -
6.	Corn	Paper bag	1 kg	6. -	19. -
7.	Type 650	Paper bag	1 kg	6. -	21. -
8.	Rye flour type 1250 for sour soup	Paper bag	1 kg	3.75	20. -

Item	Article	Type of packaging	Sale Unit	Retail prices	
				Old	New
1	2	3	4	5	6
		II. Cereals			
9.	Semolina	Paper bag	1 kg	5.50	26. -
			0.5 kg	3.30	13.50
10.	Prepared semolina	Paper bag	0.5 kg	6.20	16. -
11.	Hulled wheat	Paper bag	1 kg	5.40	22. -
12.	Mazovian pearl barley	Paper bag	1 kg	7.50	24. -
13.	Kujavian hulled barley	Paper bag	1 kg	7.20	23. -
14.	Country barley	Paper bag	1 kg	10. -	22. -
15.	Roasted whole buckwheat grits	Paper bag	1 kg	27. -	70. -
		Polyethylene bag	1 kg	29. -	72. -
16.	Roasted cracked buckwheat grits	Paper bag	1 kg	22. -	62. -
17.	Cracovian buckwheat	Paper bag	1 kg	36. -	80. -
18.	Corn (cereal)	Paper bag	1 kg	8. -	24. -
19.	Millet (cereal)	Polyethylene bag	1 kg	25. -	42. -
			0.5 kg	13. -	21.50

Item	Article	Type of packaging	Sale Unit	Retail prices	
				Old	New
1	2	3	4	5	6
		III. Flakes			
20.	Oat, regular	Small carton	0.5 kg	3.90	15.50
21.	Oat, choice mountain	Small carton	0.5 kg	5.50	17. -
22.	Oat, choice amateurish	Small carton	0.5 kg	5.50	17. -
23.	Oat, quick cooking	Small carton	0.5 kg	5.80	18.50
24.	Barley, quick cooking	Small carton	0.5 kg	4.50	17. -
25.	Rice, quick cooking	Small carton	0.4 kg	5. -	19. -
			0.75 kg	9.50	36. -

Item	Article	Type of packaging	Sale Unit	Retail prices	
				Old	New
1	2	3	4	5	6
		IV. Macaroni			
26.	Popular, without egg	a)	1 kg	7.20	33. -
		b)	0.5 kg	4.20	19. -
27.	Popular, 1-egg	a)	1 kg	9.70	39. -
		b)	0.5 kg	5.30	21. -
28.	Popular, 4-egg	a)	1 kg	16.50	56. -
		b)	0.5 kg	8.50	30.50
29.	Italian, without egg, long forms	a)	1 kg	11.50	39. -
		b) or c)	0.5 kg	6.30	22. -
	Short forms and semolina	a)	1 kg	11. -	37. -
		b) or c)	0.5 kg	6. -	21.50
30.	Italian, 1-egg, long forms	a)	1 kg	12.50	45. -
		b) or c)	0.5 kg	6.80	20.50
	Short forms and semolina	a)	1 kg	12. -	43. -
		b) or c)	0.5 kg	6.50	24.50
31.	Italian, 2-egg long forms	a)	1 kg	14.50	50. -
		b) or c)	0.5 kg	7.80	28. -
	Short forms and semolina	a)	1 kg	14. -	48. -
		b) or c)	0.5 kg	7.50	27. -
32.	Italian, 4- egg, long forms	a)	1 kg	20. -	62. -
		b) or c)	0.5 kg	10.50	34. -
	Short forms and semolina	a)	1 kg	19. -	60. -
		b) or c)	0.5 kg	10. -	33. -
33.	Italian, 5- egg, long forms	a)	1 kg	22. -	68. -
		b) or c)	0.5 kg	13.50	37. -
	Short forms and semolina	a)	1 kg	21. -	56. -
		b) or c)	0.5 kg	13. -	31. -
34.	Wroclaw, choice, long forms	a)	1 kg	21. -	50. -
		b) or c)	0.5 kg	11. -	28. -
	Short forms and semolina	a)	1 kg	19. -	48. -
		b) or c)	0.5 kg	10. -	27. -
35.	Lublin, "extra" long forms	b) or c)	0.5 kg	17.50	48.50
	Short forms	b) or c)	0.5 kg	17. -	45.50
36.	Gorzow, "extra", long forms	a)	1 kg	30. -	69. -
		b) or c)	0.5 kg	15.50	37.50
	Short forms and semolina	a)	1 kg	28. -	65. -
		b) or c)	0.5 kg	14.50	35.50
37.	Lubus, long forms	a)	1 kg	25. -	49. -
		b) or c)	0.5 kg	13. -	27.50
	Short forms	a)	1 kg	23. -	47. -
		b) or c)	0.5 kg	12. -	26.90
38.	Zulawy, choice, long forms	a)	1 kg	25. -	56. -
		b) or c)	0.5 kg	13. -	31. -
	Short forms	a)	1 kg	23. -	54. -
		b) or c)	0.5 kg	12. -	30. -

a) paper bag; b) small carton; c) small carton or polyethylene bag.

Item	Article	Type of packaging	Sale Unit	Retail prices Old	 New
1	2	3	4	5	6
		V. Breakfast flakes			
39.	Corn flakes	d)	0.25 kg	14. -	20. -
40.	Wheat flakes	d)	0.25 kg	10.50	14. -
41.	Rye flakes	d)	0.25 kg	10. -	14.50
42.	Barley flakes	d)	0.25 kg	10.50	14.50
		VI. Rice			
43.	Regular rice	a)	1 kg	8. -	28. -
44.	Choice rice	a)	1 kg	10. -	30. -

a) paper bag; d) plastic bag.

2. PRINCIPLES OF COMPENSATION

In order to equalize the higher living costs for people as a result of the increase in prices referred to in No 1 above, it is proposed to grant compensation to each person in a uniform amount of 150 zlotys a month, provided, that persons receiving pensions or annuities of less than 3,500 zlotys a month, as well as persons living on social welfare, or the alimony fund will receive 200 zlotys a month per person.

The basic compensation quota is based on a study of individual consumption of bakery goods and their products conducted in 6,400 households. This pertains to the consumption of bakery goods and macaronis. With reference to the results of this study, the consumption of bakery goods was raised from 8 to 10 kg, something which is linked with their higher consumption because of the shortages of other food articles. The consumption of the remaining products (flour, groats, flakes, rice, was calculated on the basis of ration card allowances).

In order to calculate compensation the following monthly consumption level of individual articles was adopted: bakery goods - 10 kg, flour - 1 kg, cereals and flakes - -.75 kg, macaronies - 0.2 kg, and rice - 0.17 kg. The average prices of these products up to the present respectively were: 9.80 zl, 8.95 zl, 8.75 zl, 18.90 zl, and 10 zl.

The new average prices are: bakery goods - 21.20 zl, flour - 24 zl, cereals and flakes - 23.50 zl, macaroni - 45 zl, and rice 30 zl. Thus, expenditures on these articles rise correspondently each month: for bakery goods about 114 zl, flour about 15.05 zl, cereals and flakes 11 zl, macaronis 5.20 zl, and rice 3.40 zl. Overall, expenditures rise about 148.65 zl. For example, a two-person working family will receive 300 zl a month, a three-person - 450 zl, four-person - 600 zl, etc. If there is a person in the family who is receiving a pension (annuity) of up to 3,500 zlotys a month, then the compensation quota will be appropriately higher.

The compensation applies to:

1. Workers employed in socialized work establishments;

2. Persons receiving pensions or annuities;

3. Family members of persons named in 1 and 2, for whom a family allowance is received, and persons for whom this allowance is not received, but who because of their age or health condition are not able to work;

4. Holders of scholarships, and pupils employed on the basis of an agreement to learn an occupation;

5. Persons maintaining themselves on allowances paid from the social assistance fund or the alimony fund;

6. Mothers receiving an educational allowance;

7. Other persons who were named in the attached interpretations of the Ministry of Labor, Wages and Social Affairs.

The first compensation payment for workers and their families, holders of scholarships, and students will take place with receipt of the next remuneration or grant after implementation of the new prices, and for pensioners and annuitants, simultaneously with the payment of pension or annuity in September.

Until final arrangements for compensation payments are made by the Social Security Agency (ZUS), which because of technical reasons will take 2-3 months, retirees and annuitants will be paid a lump-sum amount of 600 zlotys, which will be regarded as an advance compensation payment.

Detailed principles and compensation payment procedures will be found in this explanation.

The course of consultations with trade unions up to the present permits saying that the necessity for raising the price of bakery goods and grain-flour products is generally acknowledged. In principle, the basic amount of compensation is not questioned. On the other hand there are various opinions as to whether the compensation amount should be identical for everybody, or whether it should be differentiated depending on the amount of earnings, pensions, annuities, incomes per family member, expenditures for heating and cooking, children and teenager ages, etc. For example, on 8 September 1981, the trade union labor center of the National Consultative Commission (KPP) "Solidarnosc" proposed the following system of compensation:

I Compensation in the case of earnings--according to the amount of monthly earnings*)

to 4,000 zl -- 200 zl
4001 to 5,000 zl -- 180 zl

5001 to 7,000 zl -- 150 zl
7001 to 10,000 zl -- 120 zl
above 10,000 zl -- 100 zl

II Compensation in the case of pensions and annuities--according to the amount of monthly pension or annuity benefit

to 2,300 zl -- 200 zl
2301 to 2,500 zl -- 180 zl
2501 to 3,000 zl -- 160 zl
3001 to 4,000 zl -- 150 zl
4001 to 6,000 zl -- 120 zl
above 6,000 zl -- 100 zl

III Compensation in the case of family allowances

1. for children -- according to age up to 6 years -- about 100 zl, above 6 years*) -- about 180 zl

2. for remaining family members being supported, those employed as well as pensioners (annuitants) -- about 150 zl.

IV Compensation in the case of scholarships to students and pupils whose families do not receive family allowances**) -- 180 zl

V Compensation in the case of apprentice salaries**) -- about 180 zl

VI Compensation in the case of persons receiving social benefits***) -- about 200 zl

VII Compensation in the case of farmer pensions and annuities****) -- about 150 zl

*) Higher compensation in individual pay levels in relation to similar pension and annuity levels, is explained by the fact that, as a rule, a larger number of persons are supported from earnings.

**) Higher compensation in consideration of the organism's higher needs.

***) Higher compensation in view of the highest poverty level proven for this portion of the population.

****) It is also possible to consider a different compensation division, for example, similar to the proposal announced with respect to pensions and annuities on the basis of employment and disability.

The compensation plan presented to trade unions was accepted by the Consultative Commission of the trade unions, and also by the Confederation of Autonomous Trade Unions. The State Price Commission states that the proposals on compensation differentiation presented by the Socio-trade Labor Center "Solidarnosc" also could be adopted on condition that all trade unions agree on a position in this matter. However, much time is required for this because a strong differentiation of the compensation system would not allow immediate implementation on account of technical considerations. It would, for example, be necessary to identify each worker, each retiree and each child with respect to the amount of their remuneration, age, etc.

In view of the urgent need to check the waste of bakery goods and grain-flour products, and with the exhaustion of any further grain milling and bread baking expansion capabilities, the Price Commission proposes price changes from 31 August 1981, simultaneously stating that the compensation system presented may be modified depending on the progress of discussions which the present decision does not foreclose.

Regardless of this, the State Price Commission will instruct scientific establishments to sound out public opinion.

The introduction of new retail prices will make possible the application of new economic principles in the grain-milling and baking industry. Consistent with economic reform guidelines which establish self-government, independence and self-financing, new operational principles for this industry will become effective 1 October 1981.

Following implementation of new retail prices, the Ministry of Domestic Trade and Services will be watching the market situation closely with respect to grain-flour products, and depending on the shaping of demand, will be taking decisions to cancel controls on the sale of these articles.

EXPLANATION

IN THE MATTER OF PAYMENT OF COMPENSATION BECAUSE OF THE INCREASES IN RETAIL PRICES IN GRAIN-FLOUR PRODUCTS, AND PRINCIPLES OF REIMBURSEMENT AS A RESULT OF THE REVISION OF FOOD PRICE RATES.

In connection with the retail price increases of bakery goods and grain-flour prices the Ministry of Labor, Wages and Social Affairs, and the Ministry of Finance clarify the following:

1. Regardless of the persons mentioned in the communique, compensation applies to the following:

1) persons engaged in trade or craft contract work on behalf of the socialized economy,

2) persons employed in the agency-commission system, and as a result covered by social security,

3) persons engaged in work of a permanent nature on the basis of commission-agreement, and as a result, covered by social security,

4) temporarily unemployed persons receiving allowances from the trade activation fund,

5) persons drawing alimony fund benefits,

6) persons receiving an educational allowance from socialized work establishments,

7) persons employed in socialized work establishments who receive a sick allowance from ZUS funds,

8) creators, based on principles defined by the Minister of Culture and Art by agreement with the Minister of Labor, Wages and Social Affairs, and Minister of Finances, if they are not receiving compensation from some other source.

2. The basis for payment of compensation to members of working families, with the exception of persons named in point 3, constitutes evidence of family allowances.

3. Supported persons, for whom a family allowance (supplement) is not received, means persons who because of age or poor health, confirmed by a doctor's certificate, are incapable of work, as well as wives of workers who do not meet these criteria (pensioners, annuitants) who are raising or have raised a child. This also includes persons receiving alimony from workers, pensioners or annuitants if they meet the criteria mentioned above.

4. Workers receive compensation for the persons mentioned above on the basis of a declaration filed with their work establishment. In the case of persons from 19 to 60 years of age, this must be accompanied by a doctor's certificate which confirms an inability to work. This requirement does not pertain to youth in school for whom a family allowance is not being received, for example, persons living in a boarding school, or wives of workers (pensioners, annuitants) who are raising or have raised a child.

5. Socialized work establishments pay compensation to:

1) Workers, family members and other persons who depend on their support,

2) persons doing trade or craft contract work,

3) persons employed in the agency-commission system,

4) persons engaged on work of a permanent nature on the basis of a commission-agreement,

5) students employed on the basis of an agreement to learn an occupation,

6) persons serving apprenticeships,

7) mothers on maternity leave for whom a family allowance is not received,

8) pensioners and annuitants whose right to pension or annuity has been completely suspended.

6. The payment of compensation in work establishments operating according to the principles of economic self-financing strains operating costs, and budget resources for current operations in establishments covered by the budget. The payment of compensation in establishments operating in accordance with accounting principles is treated as a justified unfeasibility of the planned lowering of costs and financial accumulation. These compensations are regarded as a methodological change in the meaning of the rules on the establishment of a deduction base for material incentive funds.

7. The Social Security Agency pays compensation to:

1) pensioners and annuitants, members of their families and other authorized persons supported by them. These payments are made from the resources of the pension fund, the farmers' pension fund and the combatant fund,

2) socialized work establishment employees whose sick leave allowance is paid by ZUS. These payments are made from budget funds earmarked for such allowances,

3) persons receiving benefits from the alimony fund if they do not receive compensation from some other source.

8. The Polish State Railway (PKP) pension office disburses allowances to railroad worker pensioners and annuitants.

9. The compensation of students (doctoral), as well as of family members maintained by them, is paid by higher schools of learning from their funds. A condition of compensation is a declaration on the nonreceipt of compensation from another source.

10. Persons receiving allowances from the social welfare fund are paid by local social welfare offices.

11. Persons who are temporarily unemployed and benefiting from allowances paid from the vocational activity fund, as well as other persons supported by them, are paid by local employment establishments--as a debit against that fund.

12. Compensation is vested for each calendar month and is paid in advance on the schedules anticipated for the payment of allowances or benefits (with the qualification mentioned in rule 3. above).

13. Compensation is also vested in persons undertaking work for the first time, and in persons who change their employing department. Along with a change in employing department in a given month, or in case of coincidence of entitlement to compensation under different titles, only one compensation will be vested.

14. Working pensioners and annuitants whose right to pension or annuity has not been suspended receive their compensation from ZUS. When a worker retires on a pension or annuity his compensation is paid by ZUS.

15. If a worker (a person doing trade or craft contract work) is employed in more than one work establishment, his compensation is paid by the establishment identified by him as his principal employer.

16. In general, compensation does not apply to months in which the worker was not entitled to any remuneration or allowance from social insurance.

17. Compensation is paid by socialized work establishments outside of planned pay funds, and is not calculated as a basis for determining:

1) tax on the pay fund,
2) compensatory tax,
3) contributions for social insurance,
4) individual pay components,
5) pensions and annuities, allowances from social insurance or other social benefits or services.

18. Receipt of compensation does not affect rights eligibility based on the amount of salaries and incomes.

19. Budget-financed units and plants whose activity, among other things, includes the furnishing of meals, will introduce appropriately higher reimbursement rates for such meals in accordance with the decisions of appropriate ministers which were made in consultation with the Minister of Finance and the Minister of Labor, Wages and Social Affairs.

20. Increased outlays in units and budget offices in which the benefits based on meals furnished are gratuitous, or partially repayable--will be covered in entirety, or in an appropriate portion from state budget funds.

21. Units not being budget units and establishments cover higher expenses resulting from the increased retail prices of some foodstuff articles from their own funds and from payments for meals served.

22. With respect to collective nourishment at establishments--work establishments will set new charges for the use of work canteens, and for nourishment in establishment restaurants, and will observe the principle of users paying the full cost at retail prices of grain products used in the composition of meals.

23. Appropriately higher reimbursement charges for services rendered should be applied in the case of an activity conducted within the framework of the Workers Vacation Fund, or a socio-financial activity conducted by an establishment with financing from the establishment's social funds when, among other things, the activity is based on serving meals.

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GROWTH OF CHEMICAL INDUSTRY IN FIRST 4 MONTHS OF 1981

Belgrade PRIVREDNI PREGLED in Serbo-Croation 15-17 Aug 81 p 2

[Article by Dusan Ivanovic]

[Text] Yugoslav business interests were certainly pleasantly surprised by the results of development in the chemical industry in the first 4 months of this year, particularly since the factors that accompany its prosperity are both numerous and objective. Although it would have been satisfying had its growth rate in the present intermediate period been the 8.5 percent rate that was recorded, the industry also accomplished results that could only be hoped for. Specifically, basic chemical production is currently growing at a rate of 15 percent in comparison with the same period last year, while processing of semimanufactured materials showed 11 percent, and rubber processing 8 percent growth. Thus it would be desireable for this to continue, although it is hard to believe that it will. It is well known that growth will slow in the second half of the year due to shortages of raw materials and semimanufactured materials, particularly imported goods.

Even with all these factors in mind, authorities nonetheless estimate that both the basic and the processing branches of the chemical industry, along with the tire and rubber industry, will continue to record a growth rate above that of Yugoslav industry as a whole in the coming months. The growth, however, will not be as convincing as during the first 6 months. Finally, when all the factors that affect production positively and negatively have been felt, the overall results in the chemical industry will correspond to the growth rate anticipated for this year and for the intermediate plan period. In the first 4 months, foreign trade results were also good, with the basic and processing chemical branches exporting more than 300 million dollars worth of products. That meant an improvement of fully 87 percent in comparison with the same period last year. Rubber processing plants also more than doubled their exports, bringing in nearly 45 million dollars of foreign exchange income.

All of this would be fine, except for the fact that imports for the chemical industry also showed a high growth rate, even though it was less than the growth in the rate of exports. Imports were 78 percent higher than during the same period last year. Rubber processing recorded successes, because there imports fell by 58 percent.

Export-import trends in the chemical industry show more dynamic fluctuations than those in industry as a whole. It is also significant that the ratio of these two factors are swinging markedly in the direction of exports.

The Parameters Are Not So Elastic

The chemical industry, however, is only a part of industry as a whole, where the growth rate is supposed to be about 4.5 percent. Furthermore, economic investments in this period of development are to be rather limited, and the chemical industry can expect to receive some 90 billion dinars in investments. With that amount of money, it should develop fully twice as fast. In fact, it can count on some 10 percent of total economic investments, which are aimed at strengthening its production potential. Obviously, the parameters for its prosperity are not so abundant and elastic; in other words, a great deal is expected from the chemical industry, but without corresponding investments.

In the chemical industry itself, the advantage should go to basic chemicals, which should comprise 60 percent of the total, and not 45 percent as presently (with processed chemicals making up the remainder). That means that at least some 80 percent of investment capital should be directed into development of the basic chemical branch, which stagnated in the past intermediate plan period, or grew at only half the rate recorded by the processing branch.

With this amount of investments for development, about 14 billion dinars would remain for developing the processing branch, and 4-5 billion for the rubber industry.

Despite restricting factors, the chemical industry should reach a significant turning point in its development, for in order to develop optimally, any economy must have at least 10 percent of its industry devoted to chemical production. Indeed, some branches, such as the pharmaceutical industry, depend directly on the chemical industry, which produces raw materials and semimanufactured materials; a similar situation is found regarding the production of mineral fertilizers and protective substances.

There Have Been Enough Lessons

It is certain that the results of development and operations in the chemical industry will be affected considerably by prices for raw materials and semimanufactured goods, primarily in foreign markets, since the industry is such a large importer. It would be desirable for exports not to grow at a rate above 8 percent annually, in order to reach a total of 1.6 billion dollars by the end of the current intermediate period, with the proviso that in the same year, imports should not total more than 2.6 billion dollars. These 2 numbers are projected on the basis of price trends in the past year. It is not impossible that major variations could occur.

For that reason, it is essential to develop domestic raw material supplies. There have been too many lessons learned concerning that fact. For caustic soda alone, based on last year's prices, it will be necessary to designate 6 billion dinars worth of foreign exchange, for caustic soda must be imported because domestic production cannot satisfy demand. A very similar situation is found concerning calcinated soda, another basic chemical product, and with numerous other basic substances that are essential for the production of pneumatic equipment and supplies, synthetic fibers, detergents, etc.

We must reach a decision as to whether we will explore domestic phosphate deposits, or continue to import almost the entire quantity needed by Yugoslave industry. In the same way, where the rubber industry is concerned, we must decided whether we will buy rubber tree plantations in the outside world, or force the use of synthetic rubber that can be produced by processing crude oil, which is becoming ever more expensive. A large share of imports for the chemical industry, about 27 percent, goes for purchasing technology. Annually, about 200 agreements are concluded with foreign firms for various technological processes. Clearly, a selective approach is essential here as well.

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